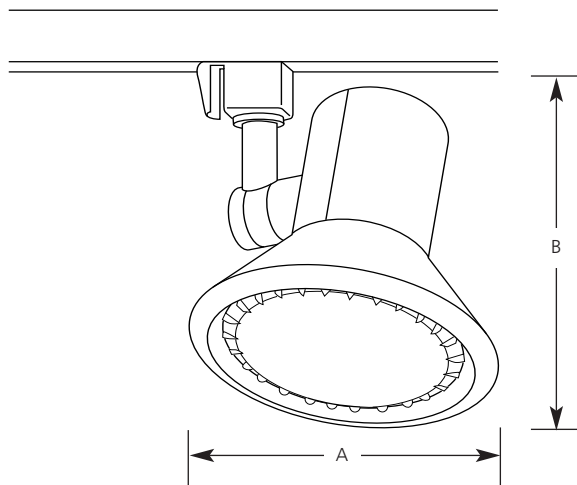


|       |                          |                          |
|-------|--------------------------|--------------------------|
| Type  |                          |                          |
|       | -28                      | -31                      |
| P9219 | <input type="checkbox"/> | <input type="checkbox"/> |
| P9220 | <input type="checkbox"/> | <input type="checkbox"/> |

| Catalog No. | Finish |       | Lamping   | Dimensions (Inches) |       |
|-------------|--------|-------|-----------|---------------------|-------|
|             | White  | Black |           | A                   | B     |
| P9219       | -28    | -31   | 50w PAR20 | 3-1/2               | 5-1/4 |
| P9220       | -28    | -31   | 75w PAR30 | 4-3/4               | 5-3/4 |



### Specifications:

#### Track Lock Up

- For use with Alpha (P9100 Series) track
- Polarity oriented
- Quarter-turn locking action
- Tab lock to track to prevent accidental removal

#### Track Head

- Injection molded polycarbonate
- 358-degree horizontal rotation
- 0 to 90-degree vertical adjustment

#### Shade

- Aluminum
- Twist-lock application
- Fully covers lamp
- Completed unit provides shallow profile

#### Labeling

- UL-CUL dry location listed

#### Photometrics

- Refer to Lamp Application Data for:
  - PAR20
  - PAR30

## R20, PAR16 and PAR20 Lamp Application Data

Figure 1  
Single lampholder

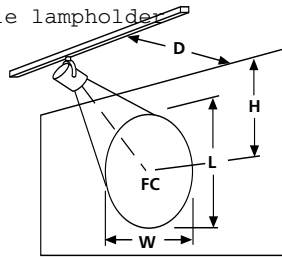
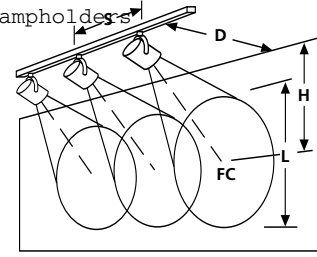


Figure 2  
Multiple lampholders



R20 Flood Lamps



|                              |   | Walls and Vertical Objects |      |     |     |    |          |     |     |    |      |          |     | Horizontal Surfaces |          |      |                |  |  |
|------------------------------|---|----------------------------|------|-----|-----|----|----------|-----|-----|----|------|----------|-----|---------------------|----------|------|----------------|--|--|
|                              |   | H                          | F.C. | L   | W   | S  | F.C.     | L   | W   | S  | F.C. | L        | W   | S                   | Clg. Ht. | F.C. | Dia. & Spacing |  |  |
|                              |   | D = 2 FT                   |      |     |     |    | D = 3 FT |     |     |    |      | D = 4 FT |     |                     |          |      |                |  |  |
| 30R20FL                      | 2 | 27                         | 2.3  | 1.5 | 1.4 | 19 | 2.4      | 1.9 | 1.8 | 13 | 2.7  | 2.4      | 2.2 | 8                   | 10       | 2.8  |                |  |  |
| CBCP - 300<br>Beam - 30 deg. | 3 | 13                         | 4.2  | 1.9 | 1.8 | 12 | 3.5      | 2.3 | 2.1 | 10 | 3.5  | 2.7      | 2.4 | 9                   | 7        | 3.4  |                |  |  |
|                              | 4 | 7                          | 7.5  | 2.4 | 2.2 | 7  | 5.1      | 2.7 | 2.4 | 7  | 4.6  | 3.0      | 2.8 | 10                  | 5        | 3.9  |                |  |  |
| 50R20FL                      | 2 | 47                         | 4.0  | 2.3 | 1.9 | 35 | 3.9      | 3.0 | 2.5 | 25 | 4.3  | 3.7      | 3.1 | 8                   | 18       | 4.2  |                |  |  |
| CBCP - 550<br>Beam - 45 deg. | 3 | 23                         | 8.8  | 3.0 | 2.5 | 22 | 6.0      | 3.5 | 2.9 | 18 | 5.7  | 4.1      | 3.4 | 9                   | 13       | 5    |                |  |  |
|                              | 4 | 12                         | 26.2 | 3.7 | 3.1 | 13 | 9.9      | 4.1 | 3.4 | 12 | 8.0  | 4.7      | 3.9 | 10                  | 10       | 5.7  |                |  |  |
| P75R20                       | 2 | 57                         | 4.0  | 2.3 | 1.9 | 42 | 3.9      | 3.0 | 2.5 | 29 | 4.3  | 3.7      | 3.1 | 8                   | 21       | 4.2  |                |  |  |
| CBCP - 650<br>Beam - 45 deg. | 3 | 28                         | 8.8  | 3.0 | 2.5 | 26 | 6.0      | 3.5 | 2.9 | 21 | 5.7  | 4.1      | 3.4 | 9                   | 15       | 5.0  |                |  |  |
|                              | 4 | 15                         | 26.2 | 3.7 | 3.1 | 16 | 9.9      | 4.1 | 3.4 | 14 | 8.0  | 4.7      | 3.9 | 10                  | 12       | 5.7  |                |  |  |

PAR16 & PAR20  
Flood Lamps



PAR16



PAR20

|                                | Walls and Vertical Objects |      |      |     |     |          |     |     |     |      |          |     |     | Horizontal Surfaces |      |                |  |
|--------------------------------|----------------------------|------|------|-----|-----|----------|-----|-----|-----|------|----------|-----|-----|---------------------|------|----------------|--|
|                                | H                          | F.C. | L    | W   | S   | F.C.     | L   | W   | S   | F.C. | L        | W   | S   | Clg. Ht.            | F.C. | Dia. & Spacing |  |
|                                | D = 2 FT                   |      |      |     |     | D = 3 FT |     |     |     |      | D = 4 FT |     |     |                     |      |                |  |
| 45PAR16NFL                     | 2                          | 124  | 2.0  | 1.4 | 1.3 | 90       | 2.1 | 1.7 | 1.6 | 63   | 2.4      | 2.1 | 2.0 | 8                   | 46   | 2.6            |  |
| CBCP - 1,400<br>Beam - 27 deg. | 3                          | 60   | 3.6  | 1.7 | 1.6 | 55       | 3.1 | 2.0 | 1.9 | 45   | 3.1      | 2.4 | 2.2 | 9                   | 33   | 3.0            |  |
|                                | 4                          | 31   | 6.2  | 2.1 | 2.0 | 34       | 4.5 | 2.4 | 2.2 | 31   | 4.1      | 2.7 | 2.5 | 10                  | 25   | 3.5            |  |
| 50PAR20NFL                     | 3                          | 60   | 4.2  | 1.9 | 1.8 | 55       | 3.5 | 2.3 | 2.1 | 45   | 3.5      | 2.7 | 2.4 | 8                   | 46   | 2.8            |  |
| CBCP - 1,400<br>Beam - 30 deg. | 4                          | 31   | 7.5  | 2.4 | 2.2 | 34       | 5.1 | 2.7 | 2.4 | 31   | 4.6      | 3.0 | 2.8 | 9                   | 33   | 3.4            |  |
|                                | 5                          | 18   | 14.1 | 2.9 | 2.6 | 21       | 7.6 | 3.1 | 2.8 | 21   | 6.2      | 3.4 | 3.1 | 10                  | 25   | 3.9            |  |
| 60/75PAR16NFL                  | 3                          | 85   | 3.6  | 1.7 | 1.6 | 79       | 3.1 | 2.0 | 1.9 | 64   | 3.1      | 2.4 | 2.2 | 8                   | 66   | 2.6            |  |
| CBCP - 2,000<br>Beam - 27 deg. | 4                          | 45   | 6.2  | 2.1 | 2.0 | 48       | 4.5 | 2.4 | 2.2 | 44   | 4.1      | 2.7 | 2.7 | 9                   | 48   | 3.0            |  |
|                                | 5                          | 29   | 10.9 | 2.6 | 2.4 | 30       | 6.5 | 2.8 | 2.6 | 31   | 5.4      | 3.1 | 3.1 | 10                  | 36   | 3.5            |  |

PAR16 & PAR20  
Spot Lamps



PAR16



PAR20

| Walls and Vertical Objects |          |     |     |     |          |     |     |     |          |     |     |     | Horizontal Surfaces |      |                |     |
|----------------------------|----------|-----|-----|-----|----------|-----|-----|-----|----------|-----|-----|-----|---------------------|------|----------------|-----|
| H                          | F.C.     | L   | W   | S   | F.C.     | L   | W   | S   | F.C.     | L   | W   | S   | Clg. Ht.            | F.C. | Dia. & Spacing |     |
|                            | D = 2 FT |     |     |     | D = 3 FT |     |     |     | D = 4 FT |     |     |     |                     |      |                |     |
| 45PAR16NSP                 | 4        | 112 | 1.8 | 0.8 | 0.8      | 120 | 1.5 | 0.9 | 0.9      | 110 | 1.4 | 1.0 | 1.0                 | 8    | 89             | 1.3 |
| CBCP - 5,000               | 5        | 64  | 2.7 | 0.9 | 0.9      | 76  | 2.0 | 1.0 | 1.0      | 76  | 1.8 | 1.1 | 1.1                 | 10   | 55             | 1.7 |
| Beam - 10 deg.             | 6        | 39  | 3.8 | 1.1 | 1.1      | 50  | 2.7 | 1.2 | 1.2      | 53  | 2.3 | 1.3 | 1.2                 | 12   | 38             | 2.0 |
| Walls and Vertical Objects |          |     |     |     |          |     |     |     |          |     |     |     | Horizontal Surfaces |      |                |     |
| H                          | F.C.     | L   | W   | S   | F.C.     | L   | W   | S   | F.C.     | L   | W   | S   | Clg. Ht.            | F.C. | Dia. & Spacing |     |
|                            | D = 3 FT |     |     |     | D = 4 FT |     |     |     | D = 5 FT |     |     |     |                     |      |                |     |
| 50PAR20NSP                 | 4        | 149 | 1.3 | 0.8 | 0.8      | 137 | 1.3 | 0.9 | 0.9      | 118 | 1.3 | 1.0 | 1.0                 | 10   | 110            | 1.2 |
| CBCP - 6,200               | 6        | 62  | 2.4 | 1.1 | 1.0      | 66  | 2.1 | 1.1 | 1.1      | 73  | 1.8 | 1.2 | 1.2                 | 12   | 69             | 1.5 |
| Beam - 9 deg.              | 8        | 30  | 4.0 | 1.3 | 1.3      | 35  | 3.2 | 1.4 | 1.4      | 37  | 2.8 | 1.5 | 1.5                 | 14   | 48             | 1.8 |
| 60/75PAR16NSP              | 4        | 180 | 1.5 | 0.9 | 0.9      | 166 | 1.4 | 1.0 | 1.0      | 143 | 1.4 | 1.1 | 1.1                 | 10   | 133            | 1.3 |
| CBCP - 7,500               | 6        | 75  | 2.7 | 1.2 | 1.2      | 80  | 2.3 | 1.3 | 1.2      | 89  | 2.0 | 1.3 | 1.3                 | 12   | 83             | 1.7 |
| Beam - 10 deg.             | 8        | 36  | 4.5 | 1.5 | 1.5      | 42  | 3.6 | 1.6 | 1.5      | 45  | 3.2 | 1.7 | 1.6                 | 14   | 57             | 2.0 |

### Walls and Vertical Objects

|      |                                                        |
|------|--------------------------------------------------------|
| H    | Height from ceiling to center of beam                  |
| D    | Distance from fixture to wall                          |
| F.C. | Footcandles at center of beam                          |
| L    | Length of effective lighted area                       |
| W    | Width of effective lighted area                        |
| S    | Spacing of multiple fixtures to effectively light wall |

### Horizontal Surfaces

|                |                                                                                            |
|----------------|--------------------------------------------------------------------------------------------|
| Clg. Ht.       | Height from floor to ceiling                                                               |
| F.C.           | Footcandles 30" from floor (work plane)                                                    |
| Dia. & Spacing | Diameter of effective lighted area and spacing to effectively light the horizontal surface |

CBCP - Center Beam Candlepower

## BR30 and PAR30 Lamp Application Data

Figure 1  
Single lampholder

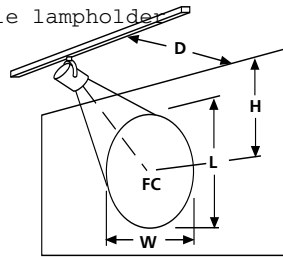
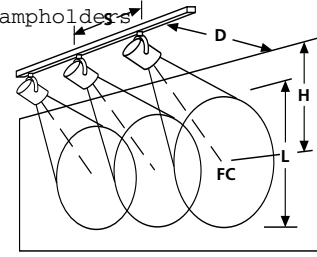


Figure 2  
Multiple lampholders



BR30 Flood Lamp



BR30 Spot Lamp



PAR30  
Flood Lamps



PAR30  
Spot Lamps



| Walls and Vertical Objects |          |      |      |     |     |          |      |     |     |      |          |     | Horizontal Surfaces |          |      |                |  |  |
|----------------------------|----------|------|------|-----|-----|----------|------|-----|-----|------|----------|-----|---------------------|----------|------|----------------|--|--|
|                            | H        | F.C. | L    | W   | S   | F.C.     | L    | W   | S   | F.C. | L        | W   | S                   | Clg. Ht. | F.C. | Dia. & Spacing |  |  |
|                            | D = 2 FT |      |      |     |     | D = 3 FT |      |     |     |      | D = 4 FT |     |                     |          |      |                |  |  |
| 65BR30FL                   | 2        | 46   | 5.7  | 2.9 | 2.3 | 34       | 5.1  | 3.8 | 2.9 | 23   | 5.6      | 4.7 | 3.6                 | 8        | 17   | 5.1            |  |  |
| CBCP - 525                 | 3        | 22   | 17.3 | 3.8 | 2.9 | 21       | 8.6  | 4.4 | 3.4 | 17   | 12.0     | 5.2 | 4.0                 | 9        | 12   | 6              |  |  |
| Beam - 55 deg.             | 4        | 12   | *    | 4.7 | 3.6 | 13       | 16.7 | 5.2 | 4.0 | 11   | 11.4     | 5.9 | 4.5                 | 10       | 9    | 6.9            |  |  |
| Walls and Vertical Objects |          |      |      |     |     |          |      |     |     |      |          |     | Horizontal Surfaces |          |      |                |  |  |
|                            | H        | F.C. | L    | W   | S   | F.C.     | L    | W   | S   | F.C. | L        | W   | S                   | Clg. Ht. | F.C. | Dia. & Spacing |  |  |
|                            | D = 2 FT |      |      |     |     | D = 3 FT |      |     |     |      | D = 4 FT |     |                     |          |      |                |  |  |
| 65BR30SP                   | 3        | 69   | 2.5  | 1.3 | 1.2 | 64       | 2.2  | 1.5 | 1.4 | 52   | 2.2      | 1.8 | 1.7                 | 8        | 54   | 1.9            |  |  |
| CBCP - 1625                | 4        | 36   | 4.0  | 1.6 | 1.5 | 39       | 3.1  | 1.8 | 1.7 | 36   | 2.9      | 2.0 | 1.9                 | 9        | 38   | 2.3            |  |  |
| Beam - 20 deg.             | 5        | 21   | 6.3  | 1.9 | 1.8 | 25       | 4.4  | 2.1 | 2.0 | 25   | 3.8      | 2.3 | 2.2                 | 10       | 29   | 2.6            |  |  |
| Walls and Vertical Objects |          |      |      |     |     |          |      |     |     |      |          |     | Horizontal Surfaces |          |      |                |  |  |
|                            | H        | F.C. | L    | W   | S   | F.C.     | L    | W   | S   | F.C. | L        | W   | S                   | Clg. Ht. | F.C. | Dia. & Spacing |  |  |
|                            | D = 2 FT |      |      |     |     | D = 3 FT |      |     |     |      | D = 4 FT |     |                     |          |      |                |  |  |
| 50PAR30/HIR/FL             | 3        | 64   | 5.3  | 2.3 | 2.0 | 59       | 4.2  | 2.7 | 2.4 | 48   | 4.2      | 3.2 | 2.8                 | 8        | 50   | 3.3            |  |  |
| CBCP - 1500                | 4        | 34   | 10.4 | 2.8 | 2.5 | 36       | 6.4  | 3.2 | 2.8 | 33   | 5.6      | 3.6 | 3.1                 | 9        | 36   | 3.9            |  |  |
| Beam - 35 deg.             | 5        | 19   | 24.2 | 3.4 | 3.0 | 23       | 9.9  | 3.7 | 3.2 | 23   | 7.6      | 4.0 | 3.6                 | 10       | 27   | 4.5            |  |  |
| 50PAR30FL                  | 3        | 60   | 5.3  | 2.3 | 2.0 | 55       | 4.2  | 2.7 | 2.4 | 45   | 4.2      | 3.2 | 2.8                 | 8        | 46   | 3.3            |  |  |
| CBCP - 1400                | 4        | 31   | 10.4 | 2.8 | 2.5 | 34       | 6.4  | 3.2 | 2.8 | 31   | 5.6      | 3.6 | 3.1                 | 9        | 33   | 3.9            |  |  |
| Beam - 35 deg.             | 5        | 18   | 24.2 | 3.4 | 3.0 | 21       | 9.9  | 3.7 | 3.2 | 21   | 7.6      | 4.0 | 3.6                 | 10       | 25   | 4.5            |  |  |
| 75PAR30FL                  | 3        | 85   | 5.8  | 2.4 | 2.1 | 79       | 4.5  | 2.8 | 2.5 | 64   | 4.5      | 3.3 | 2.9                 | 8        | 66   | 3.5            |  |  |
| CBCP - 2000                | 4        | 45   | 12.1 | 3.0 | 2.6 | 48       | 6.9  | 3.3 | 2.9 | 44   | 6.0      | 3.8 | 3.3                 | 9        | 47   | 4.1            |  |  |
| Beam - 35 deg.             | 5        | 26   | 32.3 | 3.6 | 3.1 | 30       | 11.0 | 3.9 | 3.4 | 31   | 8.3      | 4.3 | 3.7                 | 10       | 36   | 4.8            |  |  |
| 75PAR30FL-L                | 3        | 133  | 3.2  | 1.6 | 1.5 | 122      | 2.8  | 1.9 | 1.8 | 90   | 2.9      | 2.2 | 2.1                 | 8        | 102  | 2.4            |  |  |
| CBCP - 3100                | 4        | 70   | 5.5  | 2.0 | 1.9 | 74       | 4.0  | 2.2 | 2.1 | 68   | 3.7      | 2.5 | 2.3                 | 9        | 74   | 2.8            |  |  |
| Beam - 25 deg.             | 5        | 40   | 9.3  | 2.4 | 2.2 | 47       | 5.8  | 2.6 | 2.4 | 40   | 4.9      | 2.8 | 2.7                 | 10       | 55   | 3.2            |  |  |
| Walls and Vertical Objects |          |      |      |     |     |          |      |     |     |      |          |     | Horizontal Surfaces |          |      |                |  |  |
|                            | H        | F.C. | L    | W   | S   | F.C.     | L    | W   | S   | F.C. | L        | W   | S                   | Clg. Ht. | F.C. | Dia. & Spacing |  |  |
|                            | D = 3 FT |      |      |     |     | D = 4 FT |      |     |     |      | D = 5 FT |     |                     |          |      |                |  |  |
| 50PAR30/HIR/NSP            | 4        | 313  | 1.3  | 0.8 | 0.8 | 287      | 1.3  | 0.9 | 0.9 | 247  | 1.3      | 1.0 | 1.0                 | 12       | 144  | 1.5            |  |  |
| CBCP - 13,000              | 6        | 130  | 2.4  | 1.1 | 1.0 | 139      | 2.1  | 1.1 | 1.1 | 154  | 1.8      | 1.2 | 1.2                 | 16       | 71   | 2.1            |  |  |
| Beam - 9 deg.              | 8        | 63   | 4.0  | 1.3 | 1.3 | 73       | 3.2  | 1.4 | 1.4 | 77   | 2.8      | 1.5 | 1.5                 | 20       | 42   | 2.7            |  |  |
| 50PAR20NSP                 | 4        | 166  | 1.5  | 0.9 | 0.9 | 152      | 1.4  | 1.0 | 1.0 | 131  | 1.4      | 1.1 | 1.1                 | 10       | 123  | 1.3            |  |  |
| CBCP - 6,900               | 6        | 69   | 2.7  | 1.2 | 1.2 | 74       | 2.3  | 1.3 | 1.2 | 81   | 2.0      | 1.3 | 1.3                 | 12       | 76   | 1.7            |  |  |
| Beam - 10 deg.             | 8        | 33   | 4.5  | 1.5 | 1.5 | 39       | 3.6  | 1.6 | 1.5 | 41   | 3.2      | 1.7 | 1.6                 | 14       | 52   | 2.0            |  |  |
| 75PAR30NSP                 | 4        | 313  | 1.5  | 0.9 | 0.9 | 287      | 1.4  | 1.0 | 1.0 | 247  | 1.4      | 1.1 | 1.1                 | 10       | 231  | 1.3            |  |  |
| CBCP - 13,000              | 6        | 130  | 2.7  | 1.2 | 1.2 | 139      | 2.3  | 1.3 | 1.2 | 154  | 2.0      | 1.3 | 1.3                 | 14       | 98   | 2.0            |  |  |
| Beam - 10 deg.             | 8        | 63   | 4.5  | 1.5 | 1.5 | 73       | 3.6  | 1.6 | 1.5 | 77   | 3.2      | 1.7 | 1.6                 | 18       | 54   | 2.7            |  |  |
| 75PAR30NSP-L               | 4        | 217  | 1.5  | 0.9 | 0.9 | 199      | 1.4  | 1.0 | 1.0 | 171  | 1.4      | 1.1 | 1.1                 | 10       | 160  | 1.3            |  |  |
| CBCP - 9,000               | 6        | 90   | 2.7  | 1.2 | 1.2 | 96       | 2.3  | 1.3 | 1.2 | 107  | 2.0      | 1.3 | 1.3                 | 14       | 68   | 2.0            |  |  |
| Beam - 10 deg.             | 8        | 44   | 4.5  | 1.5 | 1.5 | 51       | 3.6  | 1.6 | 1.5 | 53.3 | 3.2      | 1.7 | 1.6                 | 18       | 37   | 2.7            |  |  |

### Walls and Vertical Objects

|      |                                                        |
|------|--------------------------------------------------------|
| H    | Height from ceiling to center of beam                  |
| D    | Distance from fixture to wall                          |
| F.C. | Footcandles at center of beam                          |
| L    | Length of effective lighted area                       |
| W    | Width of effective lighted area                        |
| S    | Spacing of multiple fixtures to effectively light wall |

### Horizontal Surfaces

|                |                                                                                            |
|----------------|--------------------------------------------------------------------------------------------|
| Clg. Ht.       | Height from floor to ceiling                                                               |
| F.C.           | Footcandles 30" from floor (work plane)                                                    |
| Dia. & Spacing | Diameter of effective lighted area and spacing to effectively light the horizontal surface |

CBCP - Center Beam Candlepower  
\*L is height of wall