

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P144276

Luminaire Tested: **LDRL-5XQ-F06-E-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144276  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33699)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-5XQ-F06-E-7050  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (42) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15715.5 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G3

Input Watts (W): 156.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

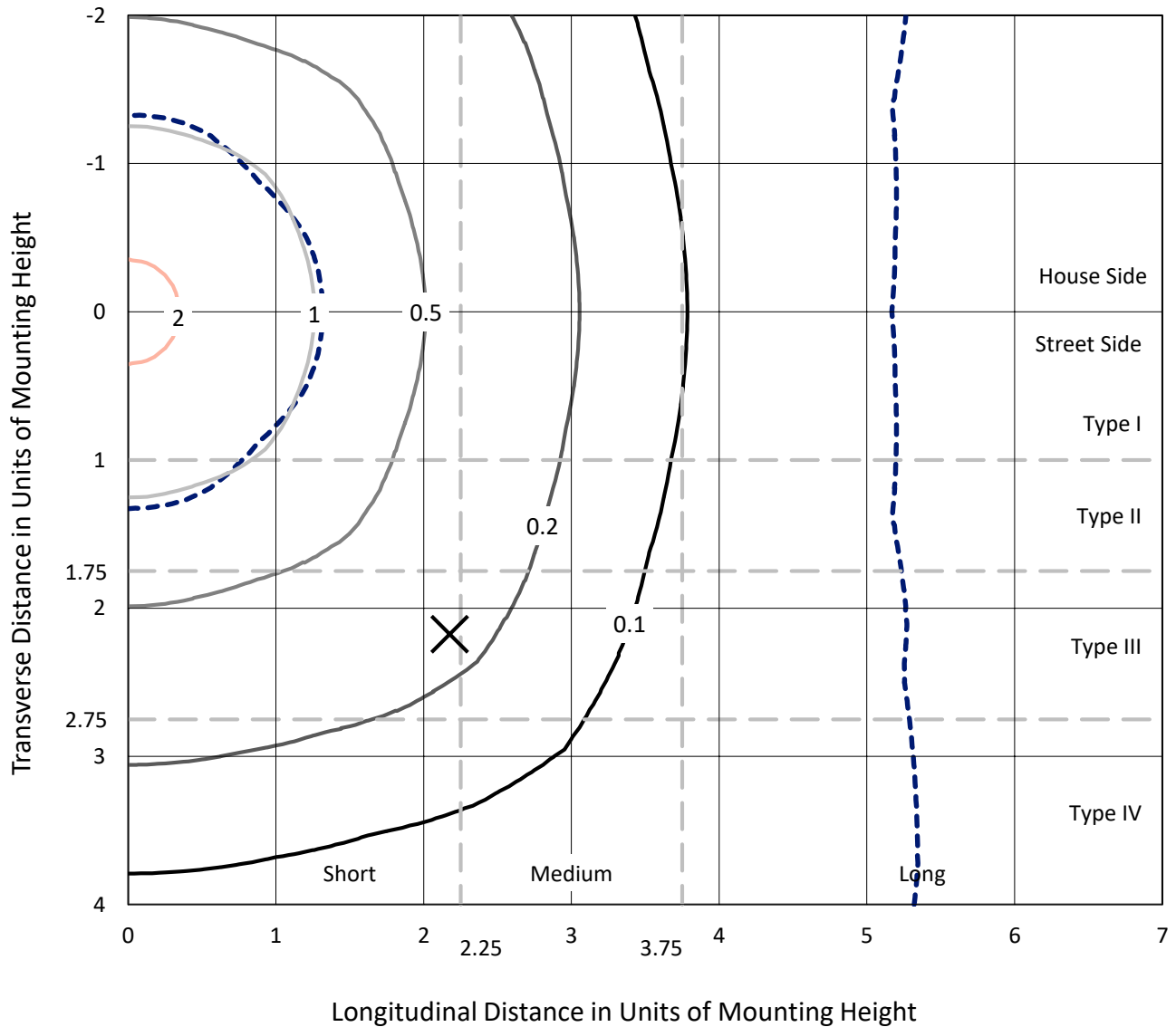


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

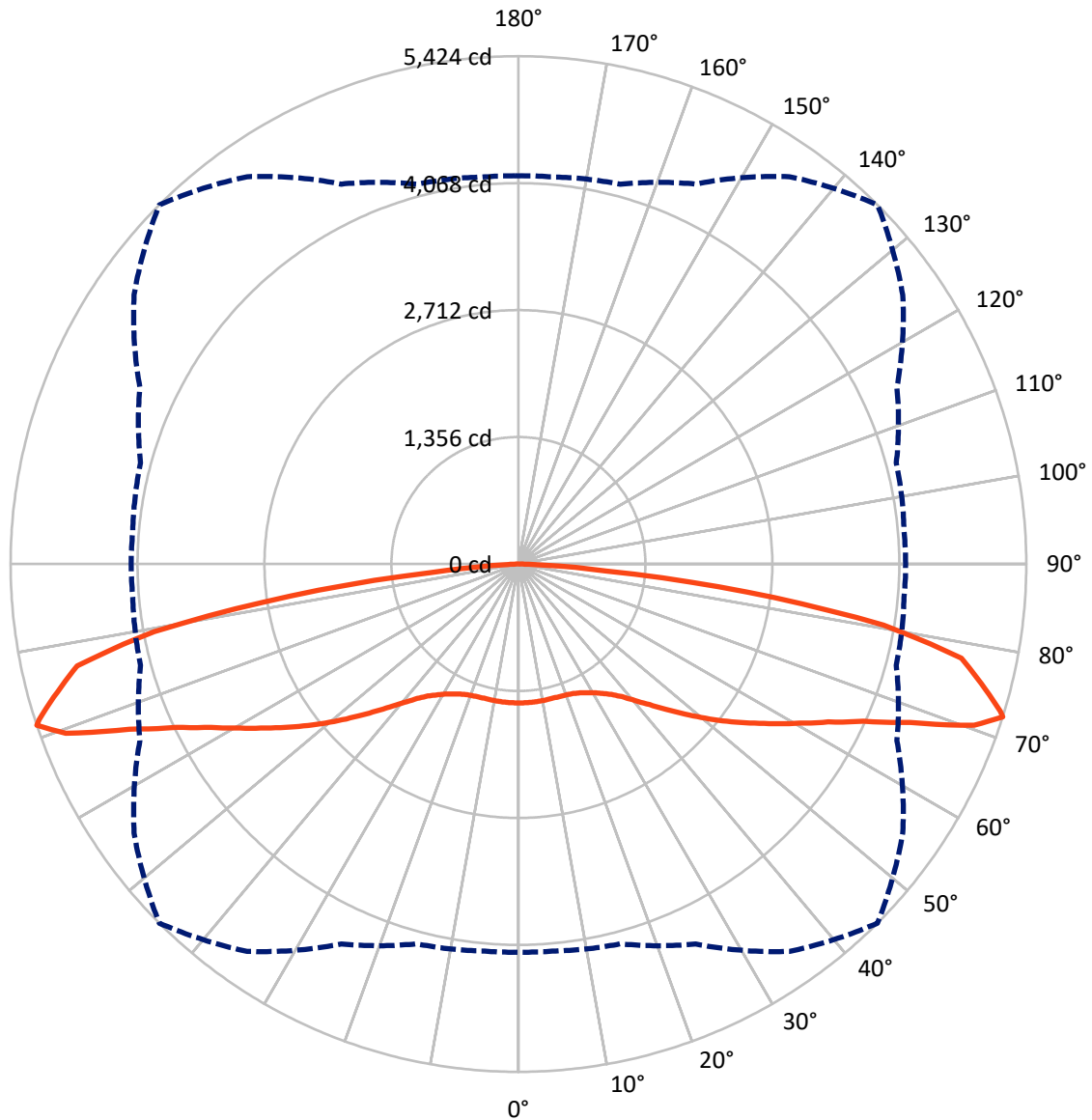


Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical

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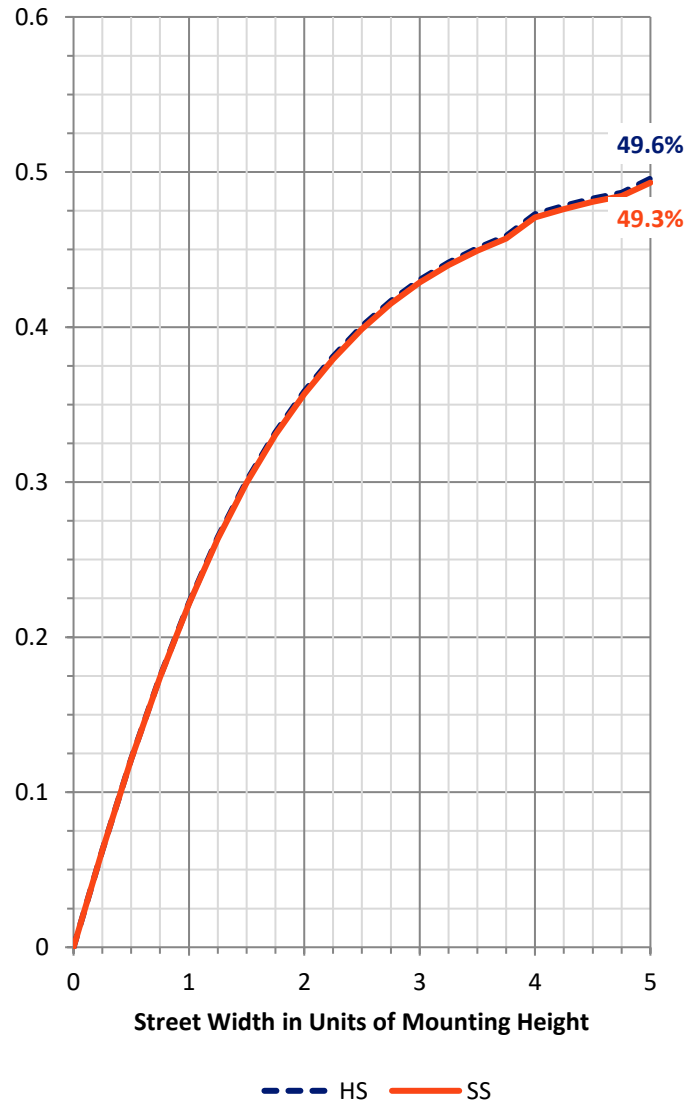
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7857.7	0.0	7857.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7857.7	0.0	7857.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	15715.5	0.0	15715.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.6	0.9
10°-20°	420.8	2.7
20°-30°	706.8	4.5
30°-40°	1075.7	6.8
40°-50°	1700.6	10.8
50°-60°	2597.4	16.5
60°-70°	3805.2	24.2
70°-80°	4323.0	27.5
80°-90°	944.3	6.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	15715.5	100.0
0°-180°	15715.5	100.0



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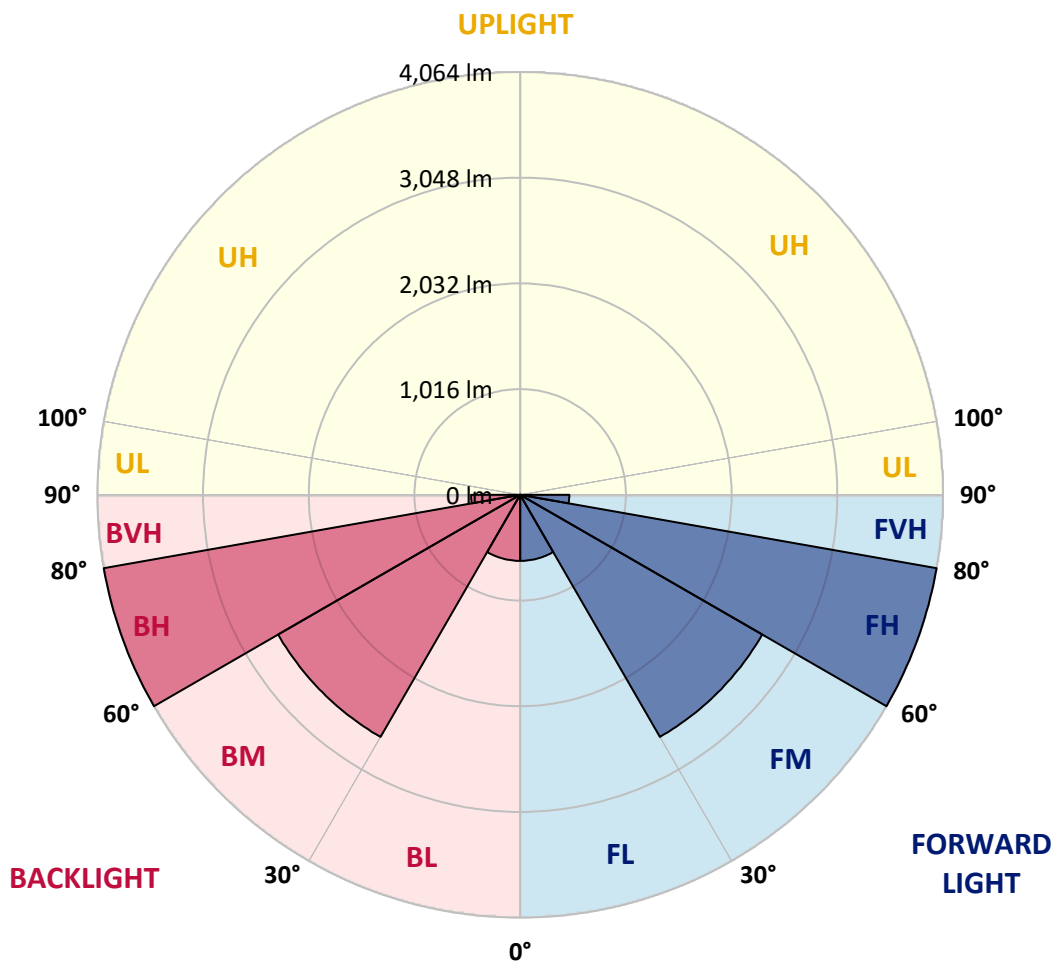
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	634.6	4.0			
FM (30°-60°)	2686.9	17.1			
FH (60°-80°)	4064.1	25.9			G2/5000
FVH (80°-90°)	472.1	3.0			G3/500
BL (0°-30°)	634.6	4.0	B2/1000		
BM (30°-60°)	2686.9	17.1	B3/5000		
BH (60°-80°)	4064.1	25.9	B4/5000		G2/5000
BVH (80°-90°)	472.1	3.0			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1
2.5°	1487.2	1486.6	1485.6	1484.6	1484.1	1483.6	1483.6	1483.6	1483.4	1483.1	1483.3
5°	1487.1	1486.6	1485.8	1485.0	1484.3	1483.6	1483.6	1483.6	1483.3	1483.0	1483.6
7.5°	1485.1	1485.6	1484.9	1484.1	1483.9	1483.6	1483.3	1483.0	1482.6	1482.0	1482.3
10°	1485.6	1487.6	1486.1	1484.6	1484.1	1483.6	1482.5	1481.5	1481.2	1481.0	1480.5
12.5°	1486.6	1488.6	1486.9	1485.1	1484.4	1483.6	1482.6	1481.6	1480.8	1480.0	1479.2
15°	1489.6	1491.2	1489.6	1488.2	1486.6	1485.1	1484.1	1483.0	1481.5	1480.0	1479.2
17.5°	1491.7	1494.2	1492.5	1490.7	1488.9	1487.1	1486.1	1485.1	1484.1	1483.1	1481.8
20°	1495.2	1497.8	1496.3	1494.8	1493.7	1492.7	1492.0	1491.2	1490.4	1489.7	1487.9
22.5°	1501.8	1503.9	1503.4	1502.9	1503.1	1503.4	1503.6	1503.9	1503.4	1502.9	1501.1
25°	1515.6	1515.6	1516.6	1517.6	1519.2	1520.6	1521.9	1523.2	1524.0	1524.8	1522.5
27.5°	1539.4	1541.5	1542.3	1543.0	1545.6	1548.1	1550.9	1553.7	1555.2	1556.8	1554.5
30°	1570.5	1570.5	1572.2	1574.0	1578.4	1582.7	1586.2	1589.8	1592.6	1595.4	1593.6
32.5°	1610.1	1612.6	1615.2	1617.8	1623.1	1628.4	1634.5	1640.6	1644.2	1647.7	1644.9
35°	1670.6	1673.6	1676.2	1678.7	1684.3	1690.0	1696.8	1703.6	1706.7	1709.7	1708.0
37.5°	1756.0	1756.0	1759.5	1763.1	1766.7	1770.2	1779.4	1788.5	1792.3	1796.1	1793.0
40°	1871.4	1871.8	1872.6	1873.4	1876.7	1880.0	1891.2	1902.4	1909.0	1915.6	1909.2
42.5°	2004.0	2009.6	2009.4	2009.1	2011.4	2013.7	2024.4	2035.0	2044.4	2053.8	2050.0
45°	2160.6	2159.5	2157.5	2155.5	2162.4	2169.2	2184.4	2199.6	2208.0	2216.4	2208.6
47.5°	2318.6	2317.1	2314.3	2311.5	2318.4	2325.2	2348.1	2371.0	2382.9	2394.8	2382.1
50°	2476.2	2482.2	2478.7	2475.2	2485.3	2495.5	2524.4	2553.4	2571.0	2588.5	2573.8
52.5°	2650.5	2655.1	2651.0	2647.0	2660.9	2674.9	2709.2	2743.5	2766.9	2790.2	2770.4
55°	2830.9	2825.3	2827.6	2829.9	2843.1	2856.4	2898.6	2940.8	2968.7	2996.6	2974.2
57.5°	2999.6	3001.7	2999.4	2997.1	3018.0	3038.8	3091.9	3145.0	3180.1	3215.2	3187.2
60°	3172.4	3173.0	3167.9	3162.8	3185.4	3208.0	3284.3	3360.5	3406.0	3451.5	3413.1
62.5°	3365.6	3365.1	3356.2	3347.3	3374.0	3400.7	3495.2	3589.7	3652.2	3714.8	3668.0
65°	3602.4	3596.4	3591.2	3586.2	3616.9	3647.7	3765.1	3882.5	3966.8	4051.2	3991.0
67.5°	3951.6	3947.0	3936.4	3925.7	3960.0	3994.3	4144.8	4295.2	4404.2	4513.2	4433.7
70°	4335.8	4327.2	4334.6	4342.0	4421.2	4500.6	4702.3	4904.0	5033.2	5162.2	5028.6
72°	4146.3	4149.8	4174.5	4199.2	4338.2	4477.2	4763.8	5050.5	5237.2	5424.0	5217.4
72.5°	4080.2	4083.2	4111.2	4139.2	4271.8	4404.4	4700.0	4995.5	5189.0	5382.4	5169.9
75°	3799.6	3807.8	3840.0	3872.4	4006.8	4141.2	4439.3	4737.4	4922.6	5107.8	4895.2
77.5°	3341.7	3367.1	3399.9	3432.7	3592.8	3752.9	4089.9	4426.8	4631.4	4836.0	4594.5
80°	2550.4	2541.2	2597.6	2654.0	2807.0	2960.0	3220.7	3481.4	3717.0	3952.6	3681.2
82.5°	991.1	1013.0	1129.8	1246.8	1407.1	1567.4	1801.0	2034.5	2246.7	2458.9	2233.0
85°	102.2	116.4	158.3	200.2	287.6	375.0	517.4	659.7	799.2	938.8	787.3
87.5°	41.2	45.2	58.2	71.2	74.5	77.8	94.0	110.2	109.5	108.8	107.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1
2.5°	1483.6	1484.1	1484.6	1484.6	1484.6	1485.3	1486.1	1485.1
5°	1484.1	1484.3	1484.6	1484.6	1484.6	1485.3	1486.1	1485.1
7.5°	1482.6	1482.6	1482.6	1483.3	1484.1	1484.3	1484.6	1484.1
10°	1480.0	1480.3	1480.5	1481.3	1482.1	1482.8	1483.6	1484.1
12.5°	1478.5	1478.8	1479.0	1479.8	1480.5	1481.2	1482.0	1483.1
15°	1478.5	1478.7	1478.9	1479.5	1480.0	1481.0	1482.1	1483.1
17.5°	1480.6	1480.0	1479.5	1480.0	1480.5	1481.8	1483.1	1484.1
20°	1486.1	1485.4	1484.6	1484.6	1484.6	1485.8	1487.1	1487.1
22.5°	1499.3	1496.8	1494.2	1493.7	1493.2	1493.5	1493.8	1494.2
25°	1520.2	1516.1	1512.0	1510.8	1509.4	1509.0	1508.4	1509.5
27.5°	1552.2	1547.6	1543.0	1540.2	1537.4	1535.9	1534.4	1534.9
30°	1591.8	1586.5	1581.2	1576.6	1572.0	1570.0	1568.0	1568.4
32.5°	1642.2	1635.8	1629.4	1623.3	1617.2	1614.4	1611.6	1612.2
35°	1706.2	1698.8	1691.4	1686.4	1681.3	1677.0	1672.6	1676.2
37.5°	1790.0	1783.2	1776.4	1773.0	1769.8	1765.9	1762.1	1762.6
40°	1902.8	1895.8	1888.6	1885.8	1883.0	1878.2	1873.4	1874.4
42.5°	2046.2	2035.5	2024.8	2019.8	2014.7	2012.4	2010.1	2011.6
45°	2200.7	2190.0	2179.4	2175.0	2170.7	2164.6	2158.5	2164.1
47.5°	2369.4	2356.0	2342.6	2334.9	2327.2	2329.3	2331.4	2326.7
50°	2559.0	2536.4	2513.8	2504.9	2496.0	2496.0	2496.0	2495.5
52.5°	2750.6	2719.4	2688.1	2680.5	2672.9	2671.1	2669.3	2667.3
55°	2951.9	2913.5	2875.2	2860.9	2846.7	2848.7	2850.8	2856.3
57.5°	3159.2	3108.7	3058.1	3041.8	3025.6	3026.8	3028.1	3037.3
60°	3374.8	3309.4	3244.2	3226.1	3208.0	3212.9	3217.7	3223.3
62.5°	3621.2	3542.2	3463.2	3439.0	3414.9	3421.0	3427.1	3441.8
65°	3930.8	3832.2	3733.6	3708.4	3683.2	3686.0	3688.8	3714.3
67.5°	4354.2	4222.8	4091.4	4068.2	4045.1	4049.2	4053.2	4094.4
70°	4894.9	4700.2	4505.6	4409.8	4314.0	4299.0	4284.0	4305.9
72°	5010.8	4735.8	4460.8	4319.5	4178.2	4156.2	4134.0	4136.1
72.5°	4957.4	4679.4	4401.4	4264.2	4127.0	4108.9	4090.8	4087.3
75°	4682.4	4410.6	4138.6	3996.8	3855.0	3820.8	3786.4	3786.4
77.5°	4353.1	4010.3	3667.5	3514.5	3361.6	3325.7	3289.8	3261.9
80°	3409.8	3102.6	2795.4	2640.1	2484.8	2427.4	2370.0	2335.9
82.5°	2007.0	1724.5	1441.9	1244.7	1047.4	988.2	929.0	846.7
85°	635.8	489.2	342.6	267.3	192.1	155.2	118.4	103.7
87.5°	105.8	85.9	66.1	63.8	61.5	48.3	35.1	29.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)