

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: McGRAW-EDISON

Report Number: P299960

Luminaire Tested: **GLNA-AF-05-LED-E1-5WQ-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299960  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-05-LED-E1-5WQ-7030-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19898.1 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G3

Input Watts (W): 162  
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

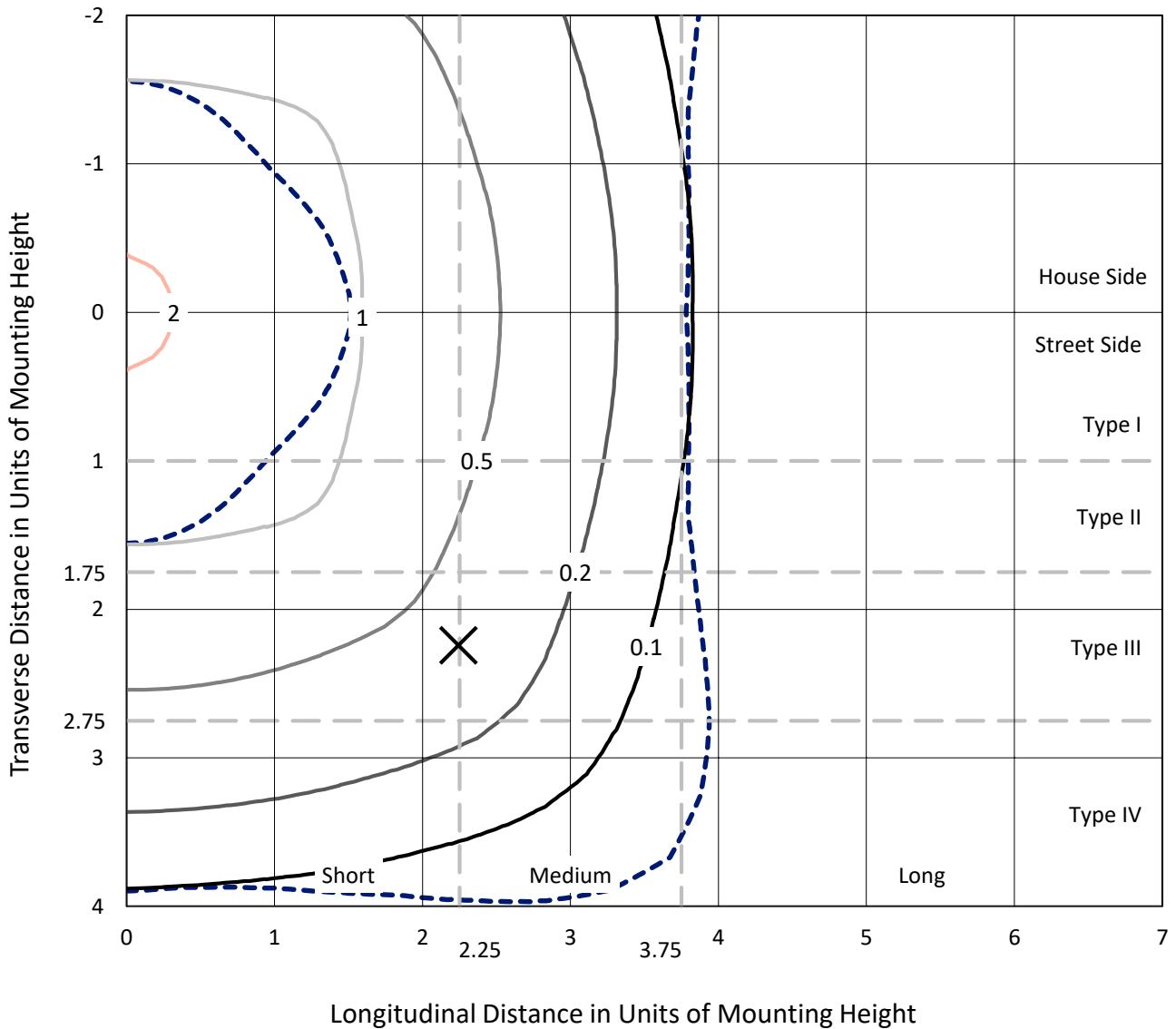


REPORT NUMBER: P299960

CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-600

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

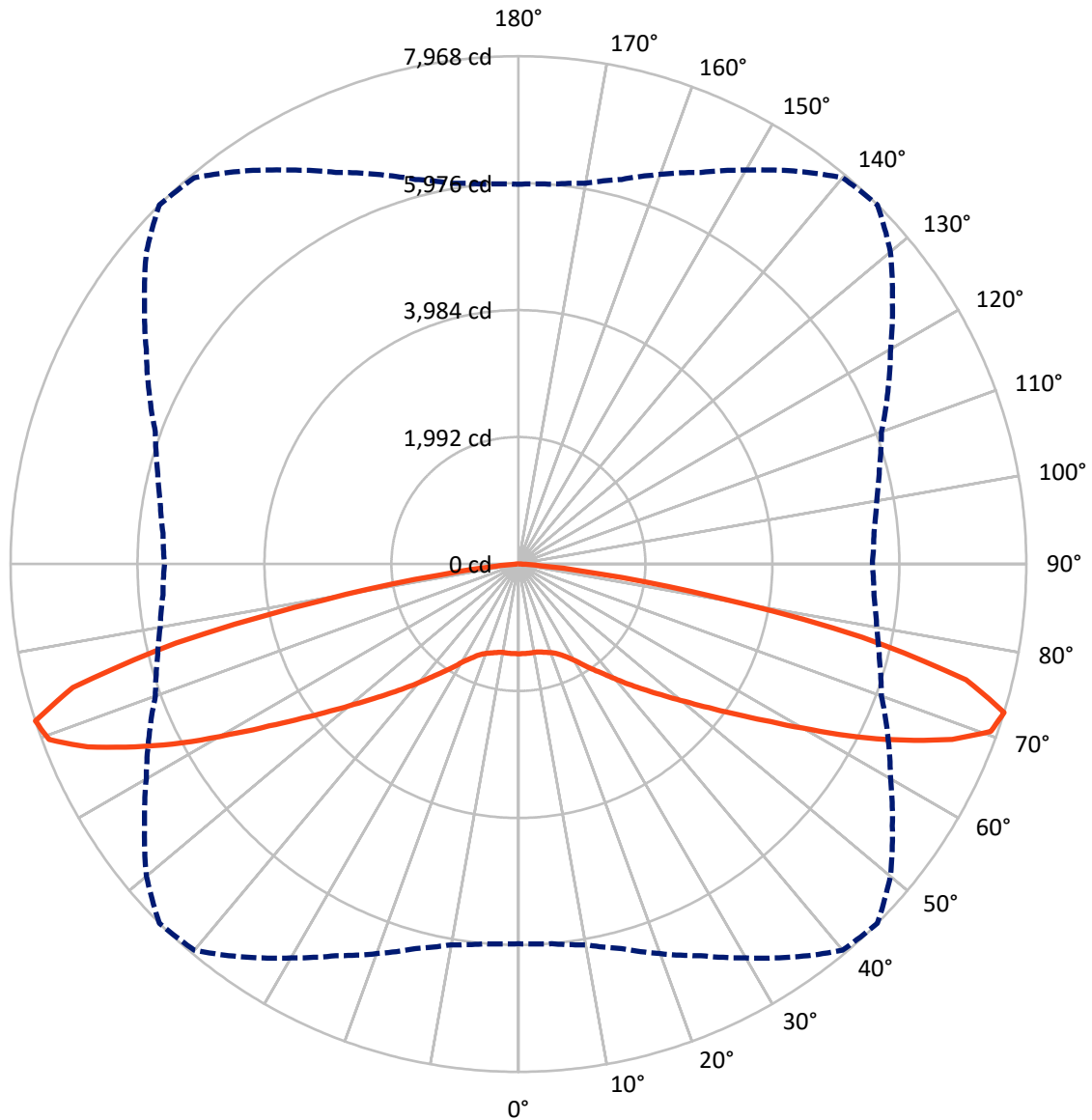


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P299960

CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-600

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P299960

CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-600

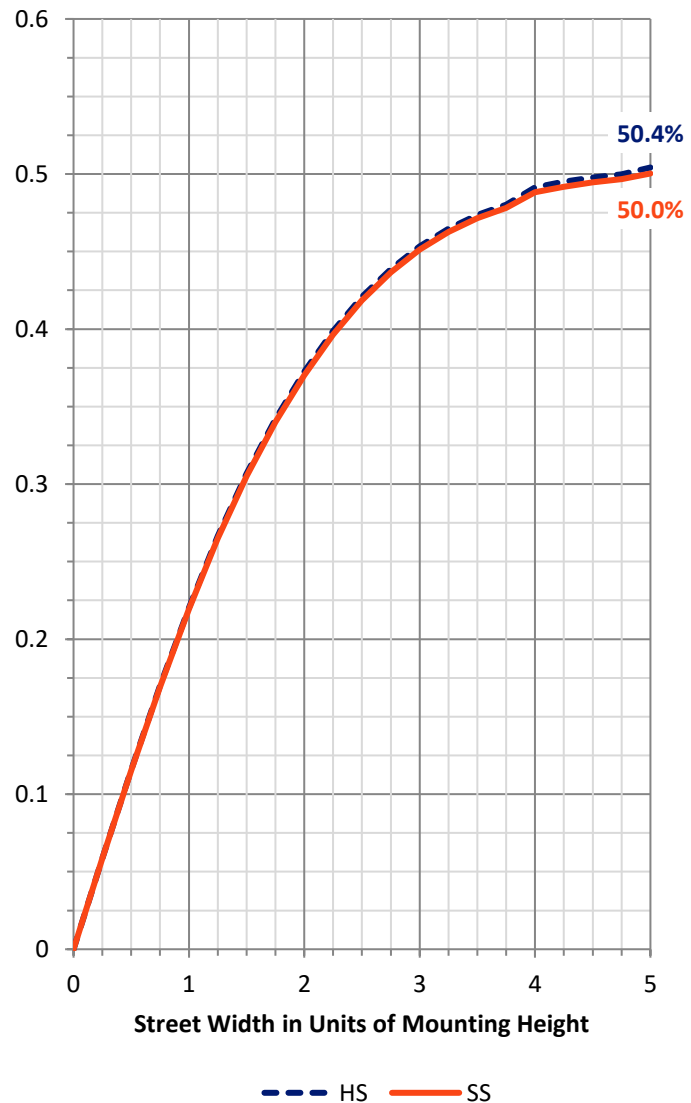
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9949.1	0.0	9949.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	9949.1	0.0	9949.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	19898.1	0.0	19898.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.6	0.7
10°-20°	408.7	2.1
20°-30°	746.8	3.8
30°-40°	1287.6	6.5
40°-50°	2201.1	11.1
50°-60°	3567.7	17.9
60°-70°	5918.6	29.7
70°-80°	5212.9	26.2
80°-90°	420.3	2.1
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°	19898.1	100.0
0°-180°	19898.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P299960

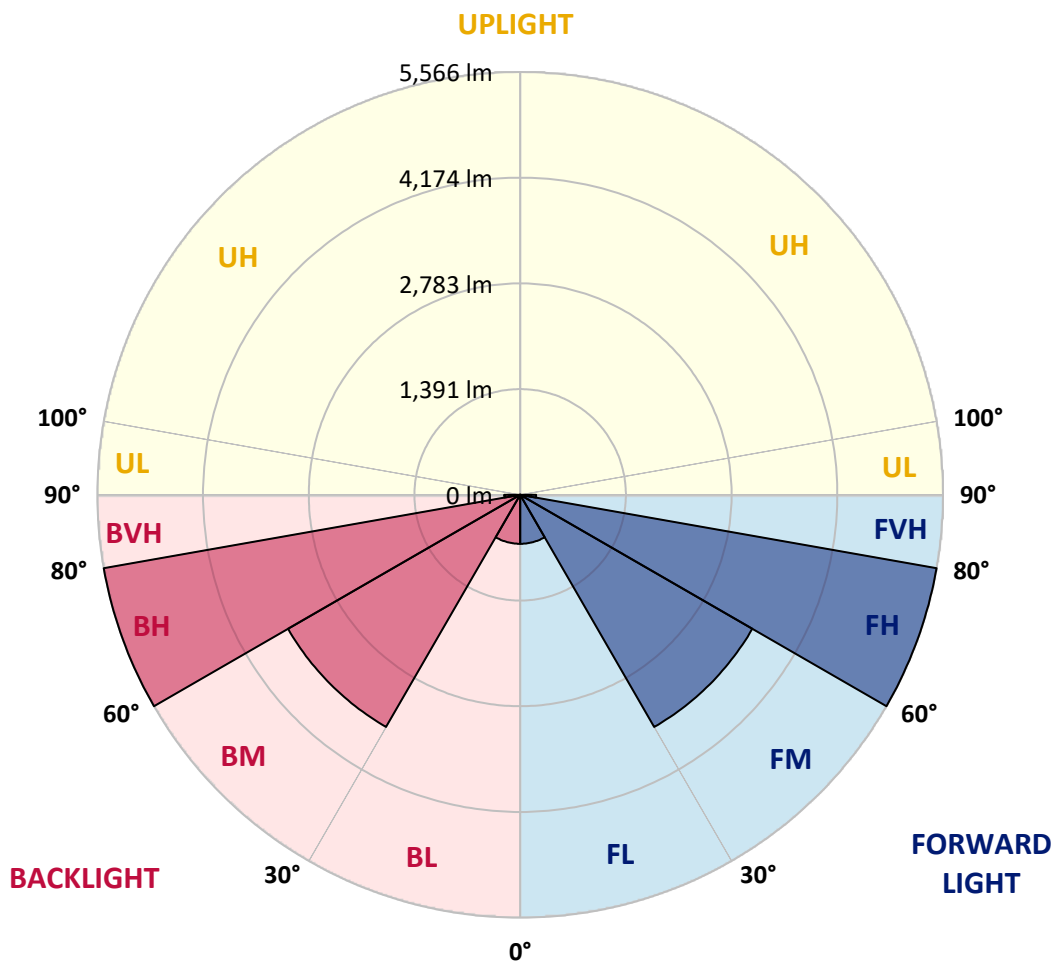
CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-600

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	645.0	3.2			
FM (30°-60°)	3528.2	17.7			
FH (60°-80°)	5565.8	28.0			G3/7500
FVH (80°-90°)	210.2	1.1			G2/225
BL (0°-30°)	645.0	3.2	B2/1000		
BM (30°-60°)	3528.2	17.7	B3/5000		
BH (60°-80°)	5565.8	28.0	B5		G3/7500
BVH (80°-90°)	210.2	1.1			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G3**

Type V Short





REPORT NUMBER: P299960

CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1409.1	1409.1	1409.1	1409.1	1409.1	1409.1	1409.1	1409.1	1409.1	1409.1	1409.1
2.5°	1409.1	1410.0	1410.9	1410.0	1410.0	1409.1	1408.2	1409.1	1408.2	1406.4	1407.3
5°	1413.7	1415.5	1415.5	1413.7	1414.6	1413.7	1411.8	1412.7	1410.9	1408.2	1408.2
7.5°	1419.1	1420.0	1420.0	1418.2	1419.1	1417.3	1415.5	1414.6	1412.7	1409.1	1406.4
10°	1427.3	1428.3	1427.3	1425.5	1425.5	1422.8	1418.2	1416.4	1412.7	1407.3	1404.5
12.5°	1436.5	1437.4	1436.5	1434.7	1433.7	1429.2	1425.5	1422.8	1420.0	1415.5	1410.9
15°	1449.3	1451.1	1449.3	1445.6	1442.9	1439.2	1437.4	1438.3	1439.2	1435.6	1431.0
17.5°	1473.0	1473.9	1471.2	1462.9	1459.3	1455.6	1455.6	1457.5	1460.2	1458.4	1453.8
20°	1516.8	1514.0	1507.7	1497.6	1493.1	1486.7	1485.8	1486.7	1486.7	1485.8	1482.1
22.5°	1571.5	1569.7	1561.5	1548.7	1542.3	1538.7	1533.2	1528.7	1527.7	1525.0	1521.3
25°	1637.3	1636.3	1626.3	1615.4	1610.8	1606.2	1601.7	1595.3	1589.8	1583.4	1579.8
27.5°	1721.2	1717.6	1703.0	1697.5	1691.1	1688.4	1682.0	1674.7	1670.1	1661.9	1657.3
30°	1813.4	1813.4	1801.5	1799.7	1799.7	1793.3	1786.0	1773.2	1765.0	1756.8	1754.1
32.5°	1905.6	1906.5	1894.6	1898.3	1901.0	1905.6	1907.4	1902.8	1897.4	1896.4	1891.0
35°	2038.8	2035.2	2023.3	2026.0	2025.1	2024.2	2024.2	2034.2	2036.1	2037.9	2026.9
37.5°	2204.0	2204.0	2192.1	2192.1	2186.7	2181.2	2173.9	2180.3	2190.3	2193.0	2185.7
40°	2392.9	2399.3	2384.7	2383.8	2385.6	2368.3	2360.1	2370.1	2376.5	2387.4	2379.2
42.5°	2615.6	2611.0	2596.4	2594.6	2584.6	2579.1	2571.8	2580.0	2590.0	2597.3	2600.1
45°	2829.1	2825.5	2809.1	2809.1	2799.0	2794.5	2798.1	2811.8	2816.4	2826.4	2836.4
47.5°	3040.0	3035.4	3024.4	3029.0	3029.9	3038.1	3050.0	3062.8	3075.6	3089.2	3093.8
50°	3255.3	3256.3	3244.4	3255.3	3269.0	3291.8	3323.8	3344.8	3371.2	3388.6	3394.1
52.5°	3451.6	3455.2	3468.0	3493.5	3520.9	3565.6	3620.4	3671.5	3715.3	3744.5	3742.7
55°	3687.0	3692.5	3723.5	3767.3	3812.0	3879.6	3960.8	4051.2	4124.2	4166.1	4139.7
57.5°	3988.2	4000.0	4034.7	4094.0	4160.7	4248.3	4359.6	4495.6	4608.8	4665.4	4622.5
60°	4401.6	4408.9	4450.9	4516.6	4596.9	4705.5	4854.3	5036.8	5196.5	5271.3	5222.1
62.5°	4946.4	4960.1	4993.9	5060.5	5142.7	5265.9	5447.5	5675.6	5874.6	5978.6	5867.3
65°	5597.1	5640.9	5669.2	5736.8	5813.4	5943.9	6133.8	6378.4	6591.9	6660.4	6531.7
67.5°	6241.5	6279.8	6329.1	6406.6	6484.2	6631.1	6807.3	7044.6	7279.1	7341.2	7141.3
70°	6523.5	6545.4	6622.0	6727.9	6876.6	7050.0	7253.6	7520.0	7810.3	7861.4	7607.7
72.5°	5958.5	5980.4	6066.2	6246.0	6505.2	6780.8	7135.8	7527.3	7910.7	7968.1	7618.6
75°	4506.6	4471.0	4597.8	4836.0	5185.5	5569.8	6066.2	6627.5	7181.5	7253.6	6836.5
77.5°	2329.0	2324.5	2420.3	2716.0	3133.0	3570.2	4116.9	4751.1	5293.2	5512.3	5172.8
80°	656.2	663.5	709.1	856.0	1099.7	1415.5	1842.6	2436.7	2880.3	3106.6	2916.8
82.5°	257.4	277.4	294.8	322.2	354.1	400.6	534.8	795.8	1067.8	1275.9	1045.0
85°	92.2	98.6	139.6	165.2	167.9	177.0	201.7	235.5	283.8	338.6	278.4
87.5°	34.7	38.3	44.7	73.9	73.0	66.6	81.2	84.9	63.9	58.4	72.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299960

CATALOG NUMBER: GLNA-AF-05-LED-E1-5WQ-7030-600

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1409.1	1409.1	1409.1	1409.1	1409.1	1409.1	1409.1	1409.1
2.5°	1405.4	1406.4	1406.4	1407.3	1408.2	1408.2	1410.0	1410.0
5°	1406.4	1406.4	1404.5	1405.4	1404.5	1404.5	1405.4	1405.4
7.5°	1404.5	1403.6	1401.8	1400.9	1399.1	1399.1	1399.1	1399.1
10°	1401.8	1400.9	1399.1	1398.1	1397.2	1397.2	1397.2	1397.2
12.5°	1409.1	1406.4	1404.5	1403.6	1403.6	1403.6	1403.6	1403.6
15°	1428.3	1421.9	1417.3	1417.3	1418.2	1420.0	1420.0	1421.9
17.5°	1452.0	1444.7	1440.1	1436.5	1438.3	1441.0	1442.9	1444.7
20°	1480.3	1476.6	1470.2	1466.6	1466.6	1470.2	1472.1	1473.0
22.5°	1519.5	1516.8	1514.0	1509.5	1509.5	1511.3	1515.0	1515.0
25°	1577.9	1576.1	1574.3	1570.6	1569.7	1569.7	1571.5	1573.4
27.5°	1650.9	1651.9	1650.0	1649.1	1646.4	1645.5	1648.2	1647.3
30°	1748.6	1753.2	1757.7	1754.1	1749.5	1746.8	1744.0	1740.4
32.5°	1880.9	1875.4	1871.8	1865.4	1857.2	1849.9	1844.4	1838.0
35°	2006.0	1996.8	1993.2	1998.7	1997.7	1993.2	1986.8	1981.3
37.5°	2159.3	2157.5	2159.3	2169.3	2167.5	2172.1	2159.3	2158.4
40°	2352.8	2354.6	2367.4	2379.2	2385.6	2392.0	2384.7	2377.4
42.5°	2577.3	2576.3	2580.9	2597.3	2608.3	2615.6	2600.1	2598.2
45°	2814.5	2808.2	2811.8	2825.5	2836.4	2844.7	2827.3	2827.3
47.5°	3075.6	3064.6	3052.7	3068.3	3074.6	3080.1	3066.4	3061.9
50°	3366.7	3343.9	3318.3	3324.7	3324.7	3322.9	3305.5	3304.6
52.5°	3700.7	3658.7	3612.2	3594.8	3584.8	3573.8	3543.7	3529.1
55°	4084.9	4021.9	3948.9	3904.2	3880.5	3850.4	3800.2	3786.5
57.5°	4533.9	4435.4	4309.4	4254.7	4201.7	4152.5	4096.8	4081.3
60°	5066.0	4920.9	4753.9	4652.6	4595.1	4547.6	4490.1	4487.4
62.5°	5659.2	5430.1	5241.2	5150.0	5108.0	5066.0	5011.2	5018.5
65°	6262.4	6023.3	5846.3	5772.4	5733.1	5698.4	5643.7	5651.9
67.5°	6857.5	6637.5	6443.1	6367.4	6323.6	6279.8	6230.5	6238.7
70°	7284.6	7011.7	6792.7	6624.8	6519.8	6401.2	6324.5	6305.3
72.5°	7162.3	6741.6	6393.9	6060.8	5865.5	5706.7	5599.0	5552.4
75°	6198.6	5623.6	5176.4	4767.6	4537.6	4350.5	4214.5	4129.6
77.5°	4603.3	3957.2	3428.7	2957.8	2585.5	2335.4	2159.3	2045.2
80°	2519.8	1916.5	1400.9	984.7	723.7	601.4	531.1	497.4
82.5°	784.9	506.5	373.3	322.2	299.3	286.6	265.6	231.8
85°	250.1	219.0	203.5	194.4	185.3	161.5	111.3	101.3
87.5°	96.7	99.5	98.6	93.1	94.9	68.4	54.8	48.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)