

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: P197526

Luminaire Tested: **TT-C5-LED-E1-CQ-LWR-LW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197526
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115438)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C5-LED-E1-CQ-LWR-LW
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
CONCENTRATED DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8928 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

Input Watts (W): 77
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

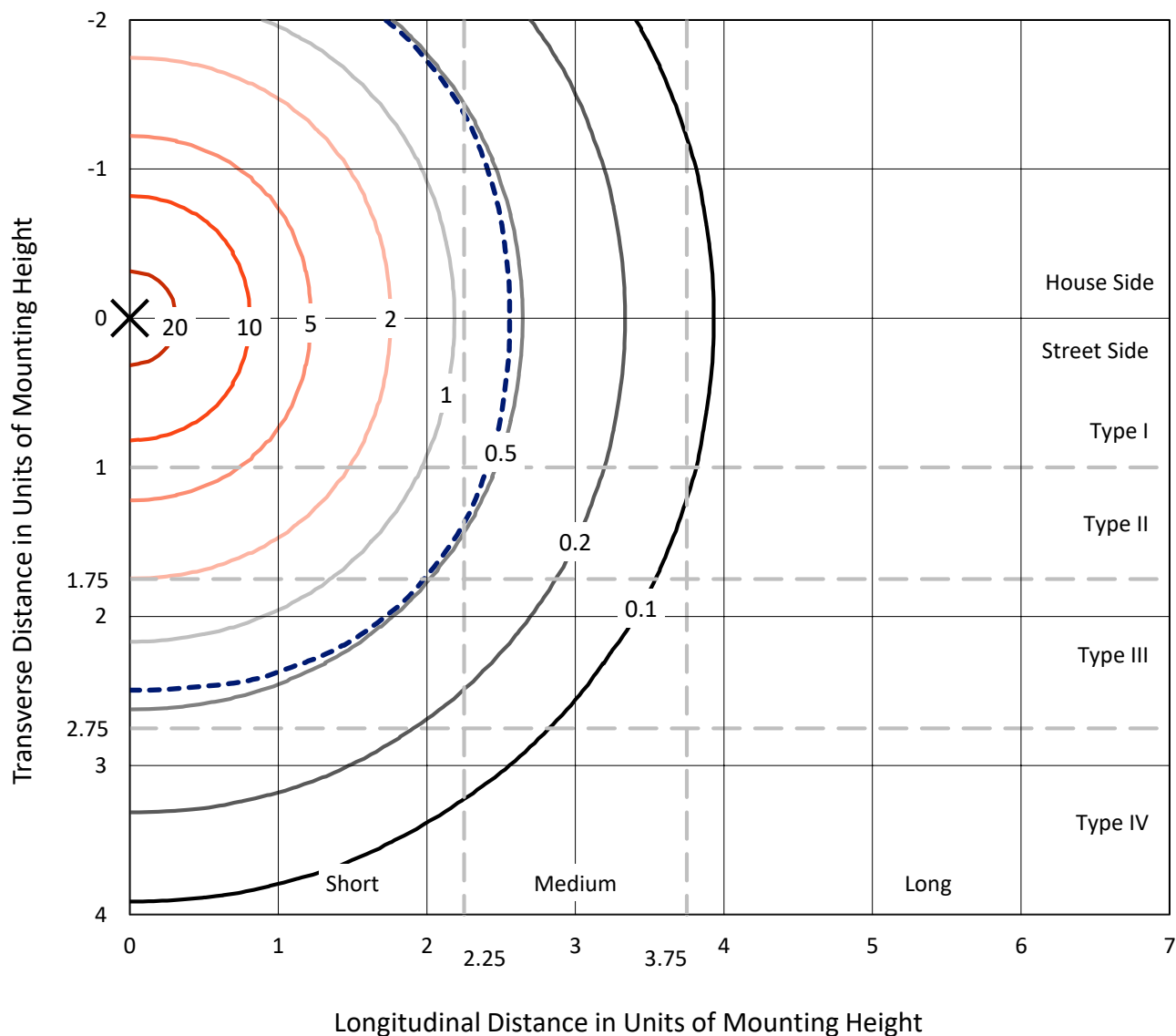


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

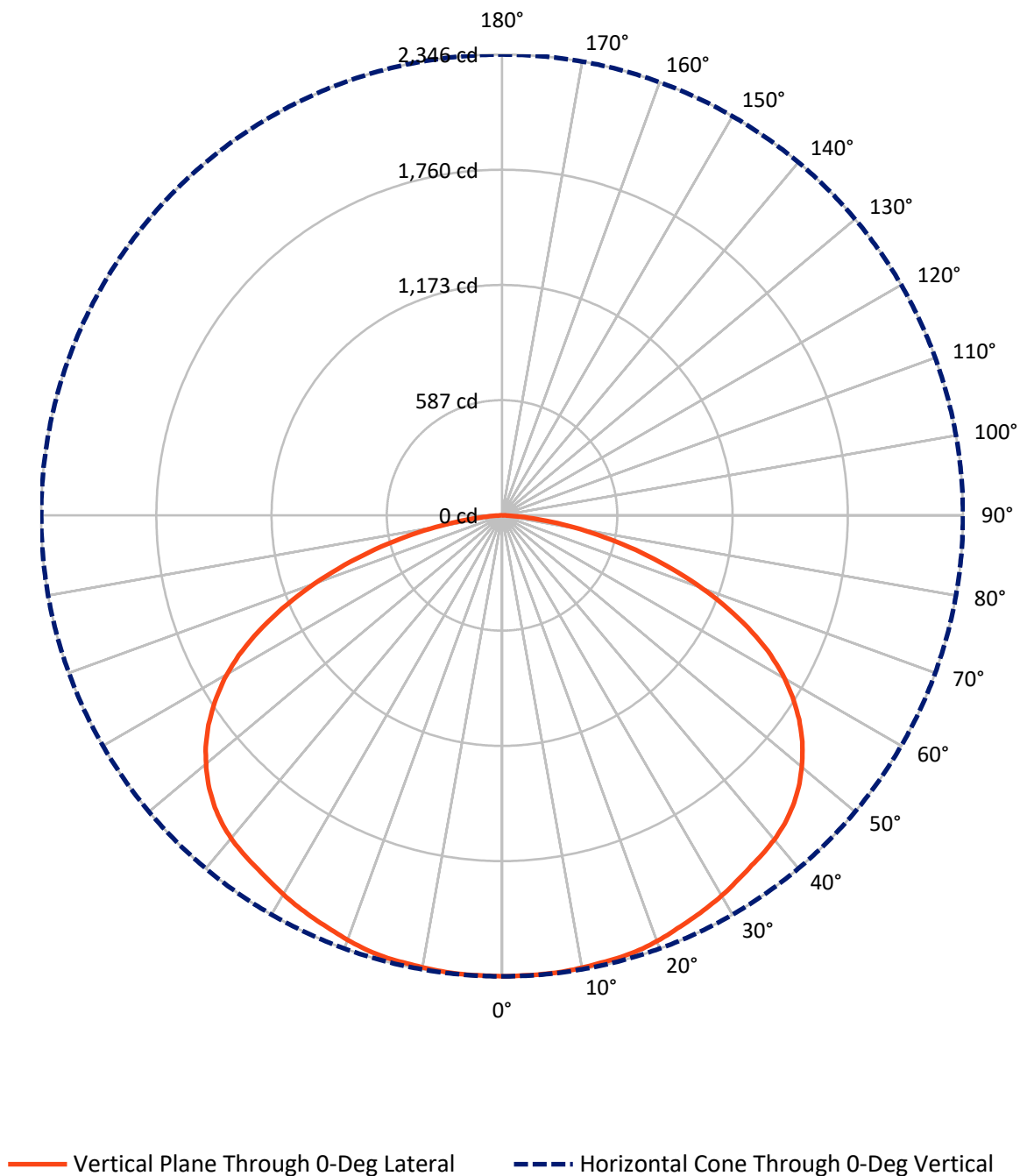


Based on 10 foot mounting height. Maximum calculated value = 23.5 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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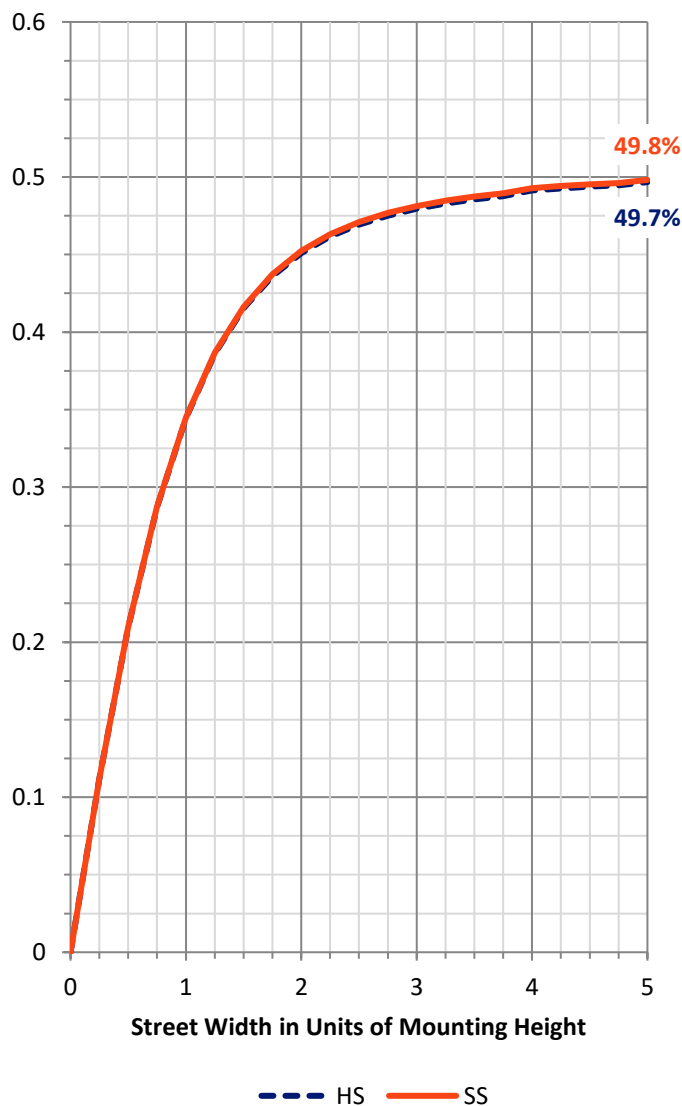
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4464.0	0.0	4464.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4464.0	0.0	4464.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	8928.0	0.0	8928.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.6	2.5
10°-20°	658.4	7.4
20°-30°	1048.6	11.7
30°-40°	1374.8	15.4
40°-50°	1621.4	18.2
50°-60°	1679.3	18.8
60°-70°	1404.4	15.7
70°-80°	765.5	8.6
80°-90°	152.0	1.7
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°	8928.0	100.0
0°-180°	8928.0	100.0

Coefficient of Utilization



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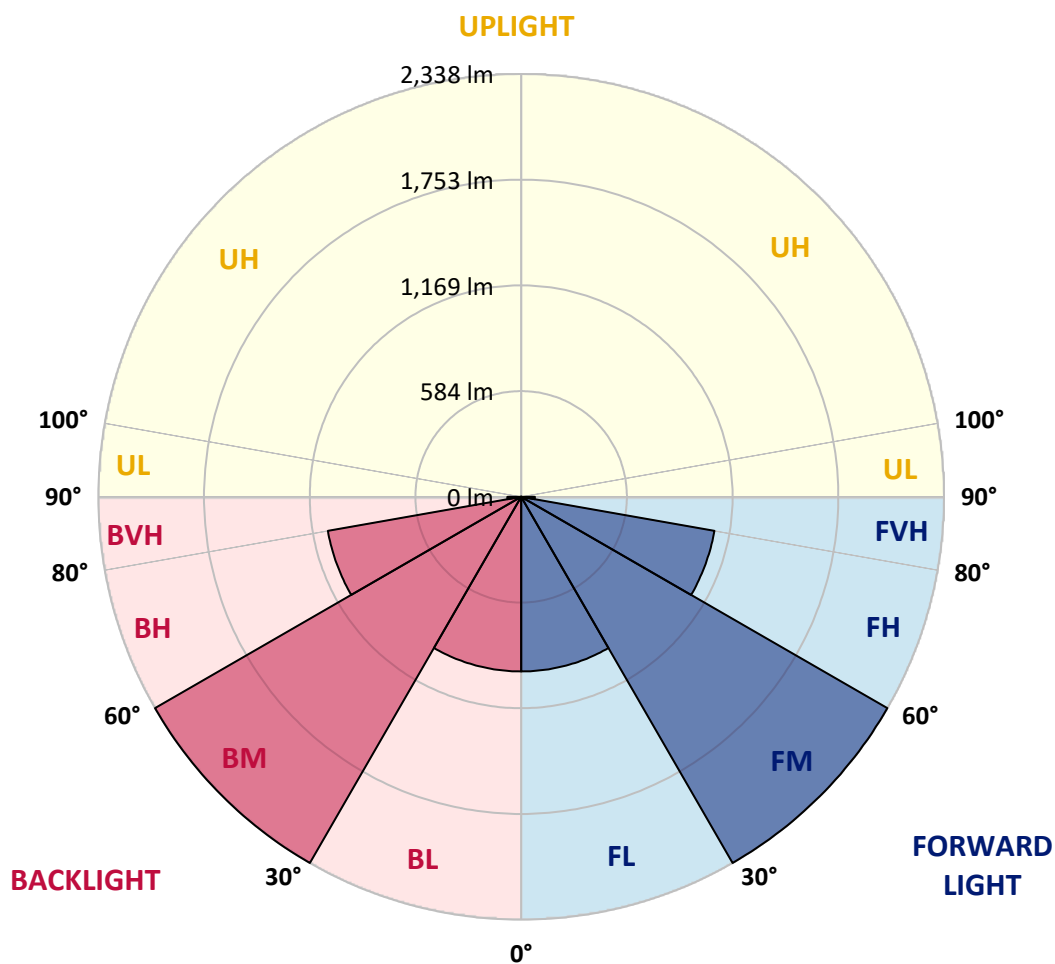
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	965.3	10.8			
FM	(30°-60°)	2337.8	26.2			
FH	(60°-80°)	1085.0	12.2			G1/1800
FVH	(80°-90°)	76.0	0.9			G1/100
BL	(0°-30°)	965.3	10.8	B2/1000		
BM	(30°-60°)	2337.8	26.2	B2/2500		
BH	(60°-80°)	1085.0	12.2	B3/2500		G1/1800
BVH	(80°-90°)	76.0	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3
2.5°	2344.4	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3	2344.4	2346.3	2346.3
5°	2344.4	2344.4	2344.4	2344.4	2346.3	2344.4	2344.4	2344.4	2344.4	2344.4	2344.4
7.5°	2342.5	2340.7	2340.7	2340.7	2340.7	2340.7	2342.5	2342.5	2342.5	2342.5	2342.5
10°	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9
12.5°	2331.3	2331.3	2331.3	2331.3	2333.2	2333.2	2333.2	2333.2	2333.2	2333.2	2331.3
15°	2327.5	2327.5	2327.5	2327.5	2327.5	2327.5	2327.5	2327.5	2327.5	2327.5	2327.5
17.5°	2318.1	2318.1	2318.1	2318.1	2320.0	2320.0	2320.0	2320.0	2320.0	2320.0	2320.0
20°	2303.1	2303.1	2303.1	2303.1	2303.1	2305.0	2306.9	2306.9	2306.9	2306.9	2306.9
22.5°	2284.3	2284.3	2286.2	2286.2	2288.1	2288.1	2289.9	2289.9	2289.9	2289.9	2289.9
25°	2267.4	2267.4	2267.4	2269.3	2269.3	2269.3	2271.2	2273.0	2273.0	2273.0	2271.2
27.5°	2250.5	2250.5	2250.5	2252.4	2252.4	2252.4	2254.3	2254.3	2256.1	2254.3	2254.3
30°	2231.7	2229.8	2229.8	2231.7	2233.6	2233.6	2235.5	2235.5	2235.5	2235.5	2233.6
32.5°	2209.2	2209.2	2211.0	2212.9	2212.9	2214.8	2216.7	2216.7	2216.7	2218.6	2214.8
35°	2188.5	2190.4	2190.4	2192.3	2196.0	2197.9	2199.8	2201.7	2201.7	2201.7	2197.9
37.5°	2171.6	2173.5	2175.4	2179.1	2182.9	2186.6	2190.4	2194.1	2192.3	2192.3	2186.6
40°	2150.9	2152.8	2156.6	2160.3	2167.8	2171.6	2177.2	2181.0	2182.9	2181.0	2175.4
42.5°	2122.8	2124.6	2128.4	2134.0	2143.4	2150.9	2156.6	2162.2	2164.1	2162.2	2156.6
45°	2085.2	2087.1	2090.8	2098.3	2109.6	2117.1	2126.5	2132.1	2135.9	2135.9	2130.3
47.5°	2038.2	2040.1	2045.7	2053.3	2064.5	2073.9	2085.2	2092.7	2096.5	2100.2	2094.6
50°	1980.0	1981.9	1989.4	1998.8	2008.2	2021.3	2034.5	2045.7	2051.4	2053.3	2051.4
52.5°	1914.2	1916.1	1923.6	1933.0	1946.2	1961.2	1976.2	1989.4	1996.9	2000.7	1996.9
55°	1835.3	1839.1	1844.7	1857.9	1872.9	1886.1	1904.8	1919.9	1929.3	1931.1	1929.3
57.5°	1743.3	1748.9	1754.6	1769.6	1784.6	1803.4	1818.4	1833.5	1844.7	1846.6	1846.6
60°	1640.0	1643.7	1649.4	1664.4	1681.3	1694.4	1715.1	1730.1	1739.5	1739.5	1741.4
62.5°	1517.9	1521.6	1531.0	1542.3	1561.1	1574.2	1591.1	1606.2	1615.5	1619.3	1617.4
65°	1375.1	1378.9	1384.5	1399.5	1414.5	1429.6	1446.5	1459.6	1469.0	1470.9	1469.0
67.5°	1217.3	1221.1	1224.8	1243.6	1258.6	1264.3	1284.9	1296.2	1301.8	1303.7	1303.7
70°	1050.1	1052.0	1057.6	1067.0	1083.9	1089.6	1102.7	1112.1	1115.9	1123.4	1117.7
72.5°	875.4	879.2	892.3	894.2	907.3	914.9	918.6	918.6	928.0	928.0	929.9
75°	702.6	704.5	710.1	712.0	721.4	721.4	719.5	723.2	730.8	730.8	732.6
77.5°	531.6	531.6	541.0	533.5	537.3	529.7	533.5	529.7	535.4	533.5	535.4
80°	372.0	372.0	377.6	370.1	372.0	364.4	366.3	364.4	364.4	366.3	366.3
82.5°	229.2	231.1	234.8	229.2	229.2	223.5	225.4	227.3	227.3	225.4	223.5
85°	112.7	112.7	116.5	114.6	112.7	109.0	110.8	112.7	112.7	110.8	110.8
87.5°	30.1	30.1	31.9	31.9	30.1	28.2	30.1	31.9	31.9	31.9	30.1
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°	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3	2346.3
2.5°	2344.4	2344.4	2346.3	2344.4	2346.3	2344.4	2346.3	2346.3
5°	2344.4	2344.4	2344.4	2344.4	2344.4	2344.4	2344.4	2344.4
7.5°	2340.7	2342.5	2340.7	2340.7	2340.7	2342.5	2340.7	2342.5
10°	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9
12.5°	2331.3	2331.3	2331.3	2331.3	2331.3	2331.3	2331.3	2329.4
15°	2327.5	2325.6	2325.6	2325.6	2323.8	2323.8	2323.8	2323.8
17.5°	2320.0	2318.1	2316.2	2316.2	2316.2	2316.2	2314.4	2314.4
20°	2306.9	2305.0	2303.1	2303.1	2301.2	2301.2	2299.3	2299.3
22.5°	2288.1	2288.1	2286.2	2284.3	2284.3	2282.4	2282.4	2280.6
25°	2271.2	2269.3	2267.4	2265.5	2263.6	2263.6	2261.8	2259.9
27.5°	2252.4	2248.6	2246.7	2244.9	2243.0	2241.1	2239.2	2237.3
30°	2231.7	2228.0	2224.2	2222.3	2218.6	2214.8	2212.9	2211.0
32.5°	2211.0	2207.3	2201.7	2196.0	2192.3	2188.5	2184.7	2182.9
35°	2194.1	2186.6	2181.0	2173.5	2167.8	2162.2	2160.3	2158.4
37.5°	2181.0	2173.5	2164.1	2156.6	2150.9	2143.4	2139.7	2135.9
40°	2167.8	2158.4	2147.2	2137.8	2130.3	2120.9	2117.1	2113.4
42.5°	2149.1	2137.8	2126.5	2115.2	2104.0	2094.6	2088.9	2085.2
45°	2122.8	2111.5	2098.3	2083.3	2072.0	2060.8	2055.1	2051.4
47.5°	2087.1	2075.8	2060.8	2047.6	2034.5	2023.2	2015.7	2011.9
50°	2043.9	2032.6	2017.6	2002.5	1989.4	1976.2	1970.6	1965.0
52.5°	1989.4	1980.0	1963.1	1951.8	1936.8	1923.6	1918.0	1914.2
55°	1921.8	1912.4	1895.5	1884.2	1869.2	1857.9	1850.4	1844.7
57.5°	1839.1	1831.6	1812.8	1801.5	1786.5	1775.2	1769.6	1765.8
60°	1737.7	1730.1	1711.4	1700.1	1686.9	1673.8	1670.0	1666.3
62.5°	1611.8	1608.0	1593.0	1579.9	1566.7	1553.6	1549.8	1547.9
65°	1465.3	1461.5	1448.4	1437.1	1425.8	1414.5	1410.8	1407.0
67.5°	1298.1	1296.2	1284.9	1275.5	1268.0	1256.7	1254.9	1251.1
70°	1119.6	1115.9	1106.5	1098.9	1093.3	1083.9	1082.0	1078.3
72.5°	933.6	931.8	926.1	916.7	916.7	903.6	901.7	899.8
75°	728.9	738.3	730.8	727.0	727.0	719.5	719.5	717.6
77.5°	533.5	542.9	548.5	541.0	548.5	541.0	541.0	539.1
80°	364.4	372.0	377.6	372.0	381.3	375.7	375.7	383.2
82.5°	221.7	229.2	232.9	231.1	236.7	234.8	232.9	238.6
85°	109.0	112.7	114.6	114.6	116.5	112.7	116.5	118.3
87.5°	28.2	30.1	31.9	30.1	31.9	31.9	31.9	33.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)