

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: P197527

Luminaire Tested: **TT-C5-LED-E1-CQ-LWR-LW-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197527
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-7050
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
CONCENTRATED DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 5000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8843.5 lumens
Efficiency: N/A
Efficacy: 114.9 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

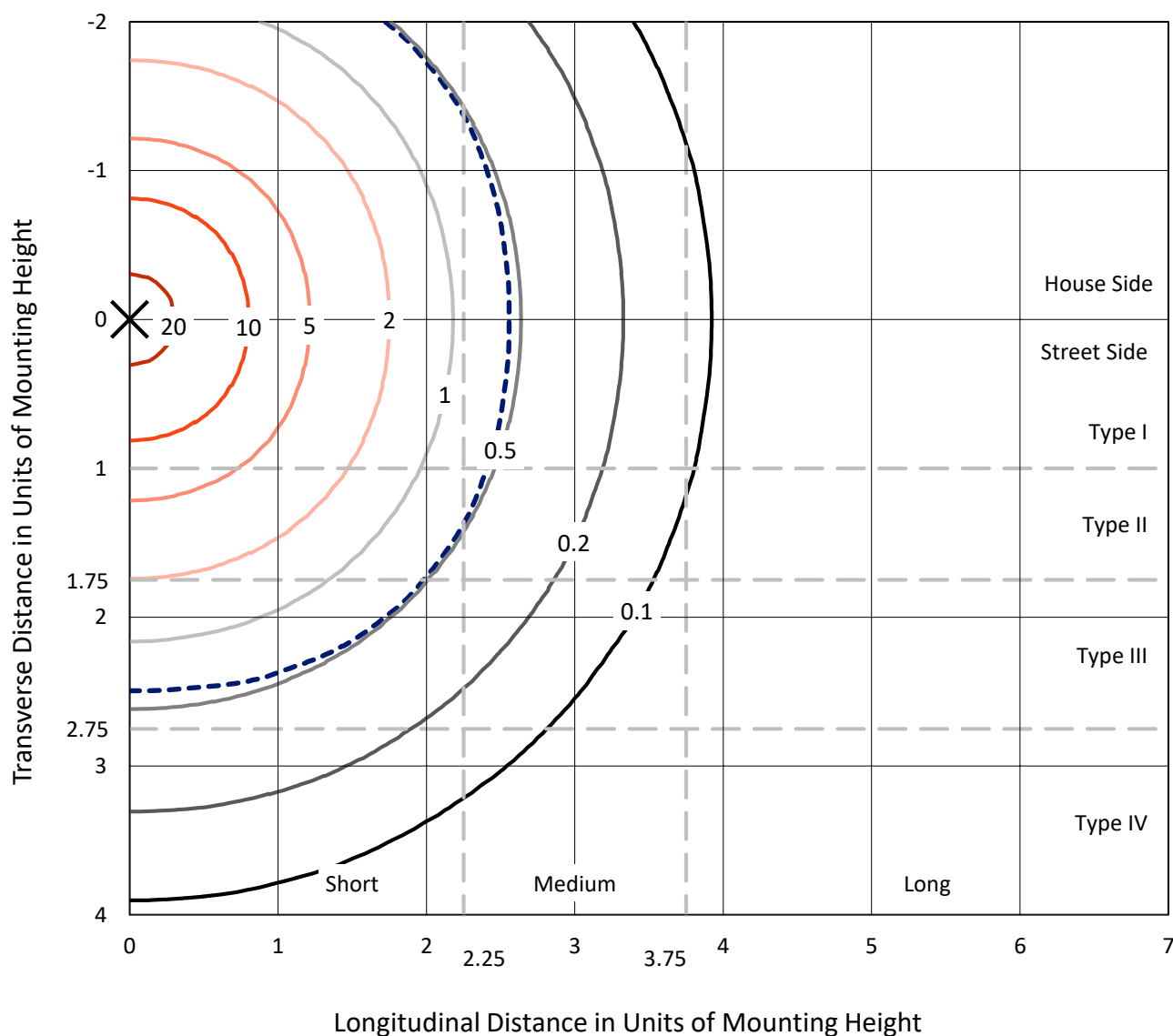


REPORT NUMBER: P197527

CATALOG NUMBER: TT-C5-LED-E1-CQ-LWR-LW-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

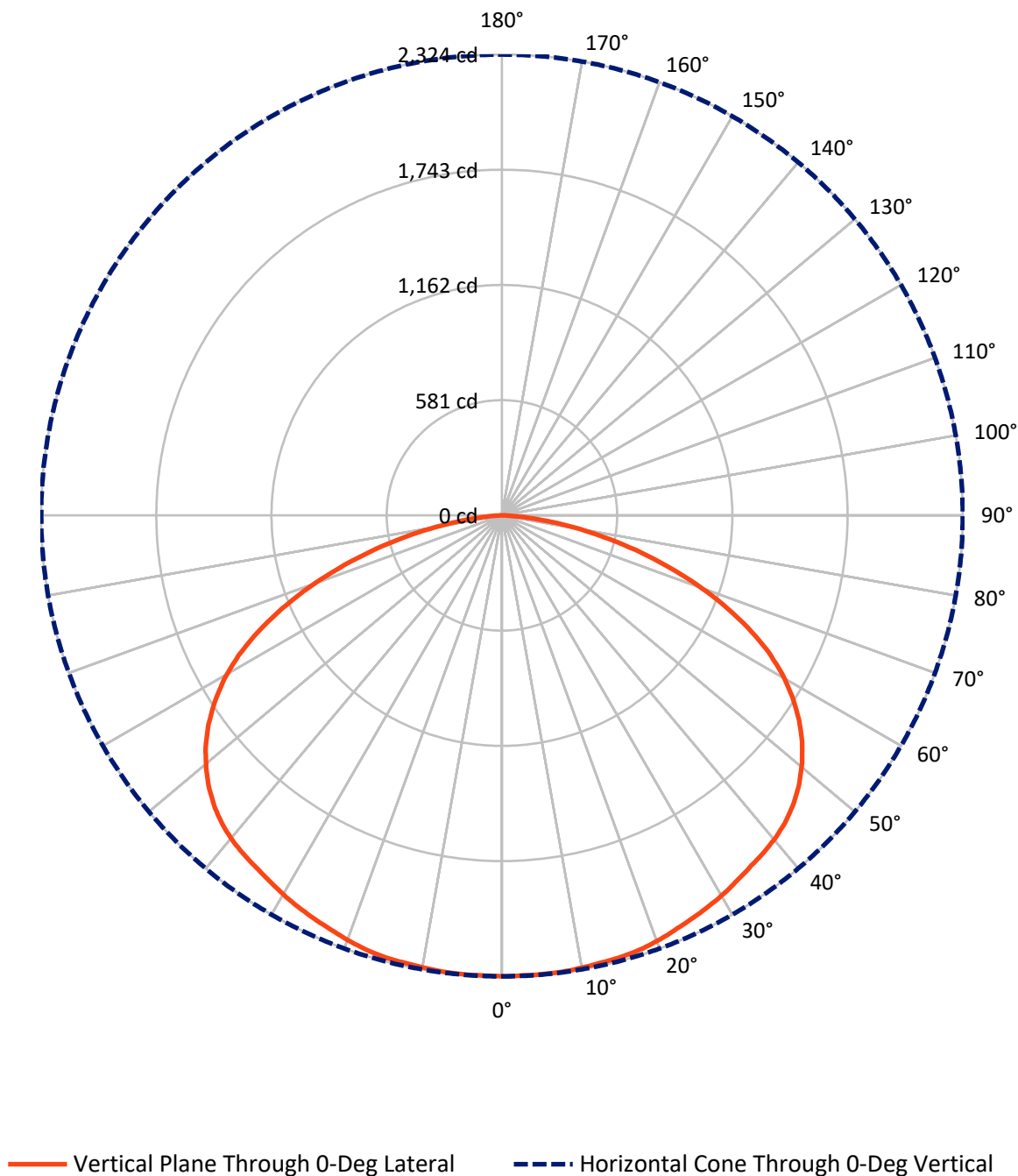


Based on 10 foot mounting height. Maximum calculated value = 23.2 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P197527

CATALOG NUMBER: TT-C5-LED-E1-CQ-LWR-LW-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P197527

CATALOG NUMBER: TT-C5-LED-E1-CQ-LWR-LW-7050

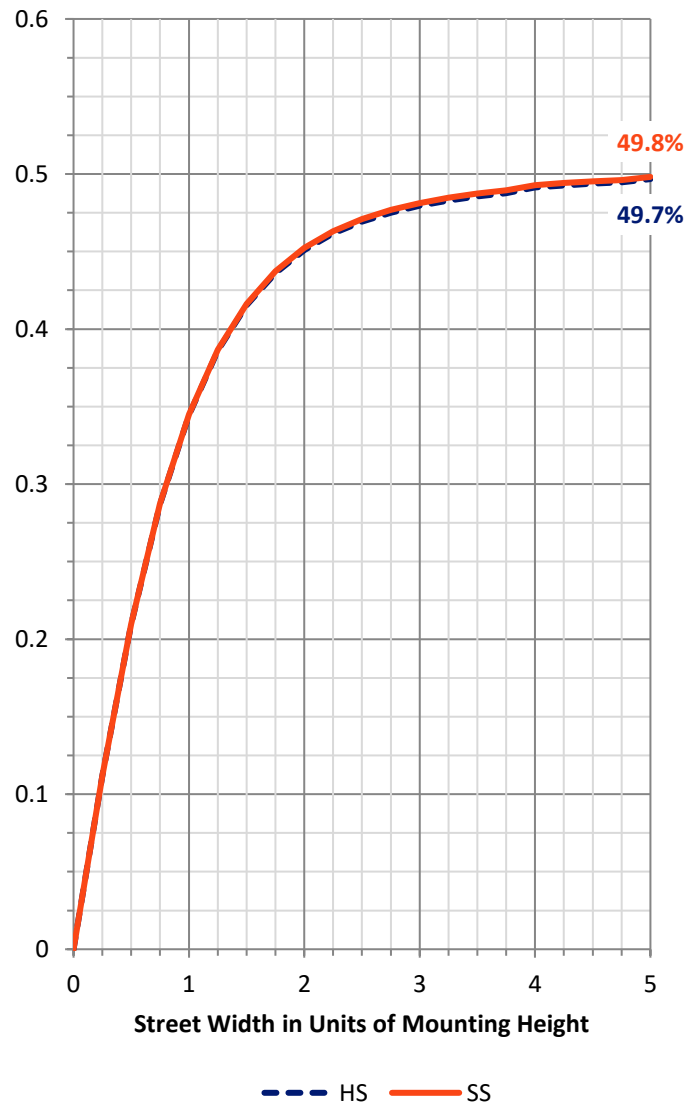
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4421.8	0.0	4421.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4421.8	0.0	4421.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	8843.5	0.0	8843.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.4	2.5
10°-20°	652.2	7.4
20°-30°	1038.7	11.7
30°-40°	1361.8	15.4
40°-50°	1606.1	18.2
50°-60°	1663.4	18.8
60°-70°	1391.1	15.7
70°-80°	758.2	8.6
80°-90°	150.5	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°	8843.5	100.0
0°-180°	8843.5	100.0

Coefficient of Utilization



REPORT NUMBER: P197527

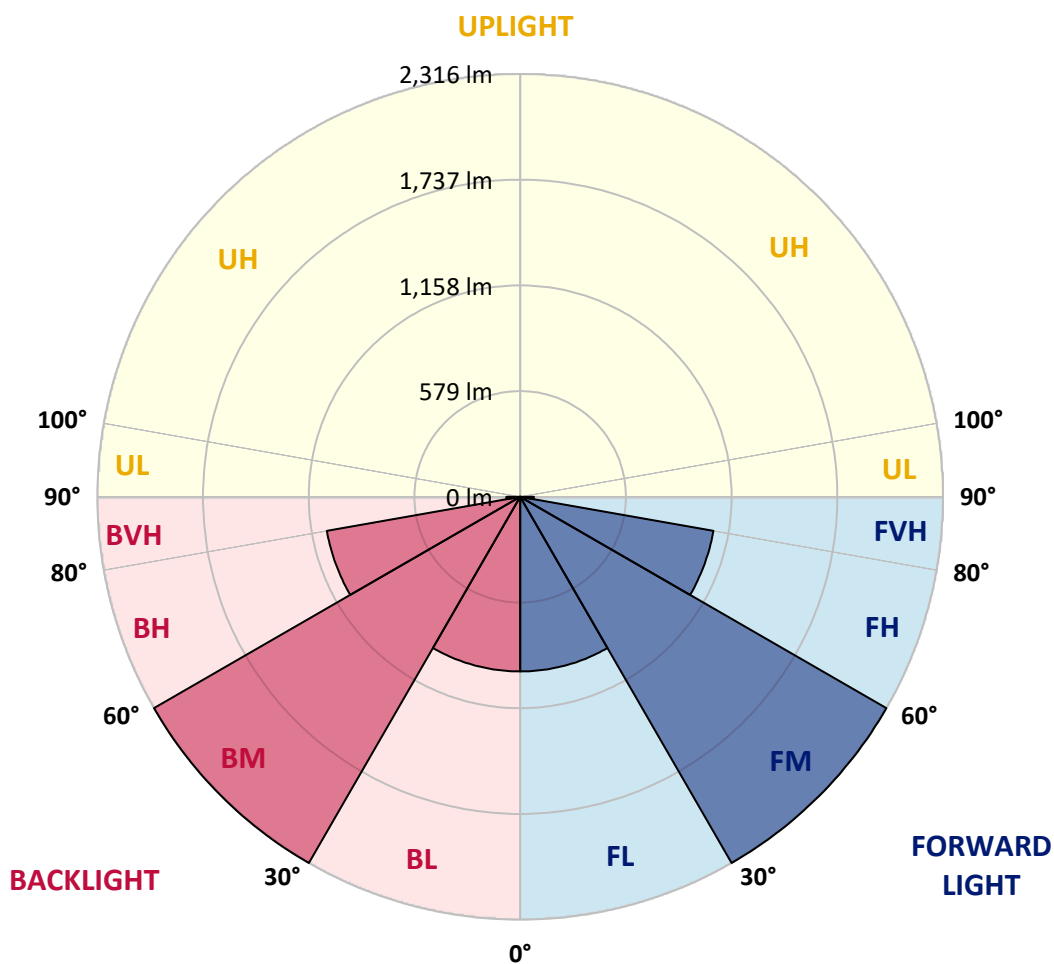
CATALOG NUMBER: TT-C5-LED-E1-CQ-LWR-LW-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	956.2	10.8			
FM	(30°-60°)	2315.7	26.2			
FH	(60°-80°)	1074.7	12.2			G1/1800
FVH	(80°-90°)	75.3	0.9			G1/100
BL	(0°-30°)	956.2	10.8	B2/1000		
BM	(30°-60°)	2315.7	26.2	B2/2500		
BH	(60°-80°)	1074.7	12.2	B3/2500		G1/1800
BVH	(80°-90°)	75.3	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



REPORT NUMBER: P197527

CATALOG NUMBER: TT-C5-LED-E1-CQ-LWR-LW-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1
2.5°	2322.2	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2322.2	2324.1	2324.1
5°	2322.2	2322.2	2322.2	2322.2	2324.1	2322.2	2322.2	2322.2	2322.2	2322.2	2322.2
7.5°	2320.4	2318.5	2318.5	2318.5	2318.5	2318.5	2320.4	2320.4	2320.4	2320.4	2320.4
10°	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8
12.5°	2309.2	2309.2	2309.2	2309.2	2311.1	2311.1	2311.1	2311.1	2311.1	2311.1	2309.2
15°	2305.5	2305.5	2305.5	2305.5	2305.5	2305.5	2305.5	2305.5	2305.5	2305.5	2305.5
17.5°	2296.2	2296.2	2296.2	2296.2	2298.1	2298.1	2298.1	2298.1	2298.1	2298.1	2298.1
20°	2281.3	2281.3	2281.3	2281.3	2281.3	2283.2	2285.0	2285.0	2285.0	2285.0	2285.0
22.5°	2262.7	2262.7	2264.6	2264.6	2266.4	2266.4	2268.3	2268.3	2268.3	2268.3	2268.3
25°	2246.0	2246.0	2246.0	2247.8	2247.8	2247.8	2249.7	2251.5	2251.5	2251.5	2249.7
27.5°	2229.2	2229.2	2229.2	2231.1	2231.1	2231.1	2232.9	2232.9	2234.8	2232.9	2232.9
30°	2210.6	2208.7	2208.7	2210.6	2212.5	2212.5	2214.3	2214.3	2214.3	2214.3	2212.5
32.5°	2188.3	2188.3	2190.1	2192.0	2192.0	2193.9	2195.7	2195.7	2195.7	2197.6	2193.9
35°	2167.8	2169.7	2169.7	2171.5	2175.2	2177.1	2179.0	2180.8	2180.8	2180.8	2177.1
37.5°	2151.1	2152.9	2154.8	2158.5	2162.2	2165.9	2169.7	2173.4	2171.5	2171.5	2165.9
40°	2130.6	2132.4	2136.2	2139.9	2147.3	2151.1	2156.6	2160.4	2162.2	2160.4	2154.8
42.5°	2102.7	2104.5	2108.3	2113.8	2123.1	2130.6	2136.2	2141.7	2143.6	2141.7	2136.2
45°	2065.5	2067.3	2071.0	2078.5	2089.6	2097.1	2106.4	2112.0	2115.7	2115.7	2110.1
47.5°	2018.9	2020.8	2026.4	2033.8	2045.0	2054.3	2065.5	2072.9	2076.6	2080.3	2074.8
50°	1961.3	1963.1	1970.6	1979.9	1989.2	2002.2	2015.2	2026.4	2032.0	2033.8	2032.0
52.5°	1896.1	1898.0	1905.4	1914.7	1927.8	1942.6	1957.5	1970.6	1978.0	1981.7	1978.0
55°	1818.0	1821.7	1827.3	1840.3	1855.2	1868.2	1886.8	1901.7	1911.0	1912.9	1911.0
57.5°	1726.8	1732.4	1738.0	1752.8	1767.7	1786.3	1801.2	1816.1	1827.3	1829.1	1829.1
60°	1624.5	1628.2	1633.8	1648.6	1665.4	1678.4	1698.9	1713.8	1723.1	1723.1	1724.9
62.5°	1503.5	1507.2	1516.5	1527.7	1546.3	1559.3	1576.1	1591.0	1600.3	1604.0	1602.1
65°	1362.1	1365.8	1371.4	1386.3	1401.2	1416.0	1432.8	1445.8	1455.1	1457.0	1455.1
67.5°	1205.8	1209.5	1213.2	1231.8	1246.7	1252.3	1272.8	1283.9	1289.5	1291.4	1291.4
70°	1040.2	1042.0	1047.6	1056.9	1073.7	1079.2	1092.3	1101.6	1105.3	1112.7	1107.2
72.5°	867.1	870.8	883.9	885.7	898.8	906.2	909.9	909.9	919.2	919.2	921.1
75°	695.9	697.8	703.4	705.2	714.5	714.5	712.7	716.4	723.8	723.8	725.7
77.5°	526.6	526.6	535.9	528.5	532.2	524.7	528.5	524.7	530.3	528.5	530.3
80°	368.4	368.4	374.0	366.6	368.4	361.0	362.9	361.0	361.0	362.9	362.9
82.5°	227.0	228.9	232.6	227.0	227.0	221.4	223.3	225.2	225.2	223.3	221.4
85°	111.6	111.6	115.4	113.5	111.6	107.9	109.8	111.6	111.6	109.8	109.8
87.5°	29.8	29.8	31.6	31.6	29.8	27.9	29.8	31.6	31.6	31.6	29.8
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: P197527

CATALOG NUMBER: TT-C5-LED-E1-CQ-LWR-LW-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1	2324.1
2.5°	2322.2	2322.2	2324.1	2322.2	2324.1	2322.2	2324.1	2324.1
5°	2322.2	2322.2	2322.2	2322.2	2322.2	2322.2	2322.2	2322.2
7.5°	2318.5	2320.4	2318.5	2318.5	2318.5	2320.4	2318.5	2320.4
10°	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8	2314.8
12.5°	2309.2	2309.2	2309.2	2309.2	2309.2	2309.2	2309.2	2307.4
15°	2305.5	2303.6	2303.6	2303.6	2301.8	2301.8	2301.8	2301.8
17.5°	2298.1	2296.2	2294.3	2294.3	2294.3	2294.3	2292.5	2292.5
20°	2285.0	2283.2	2281.3	2281.3	2279.4	2279.4	2277.6	2277.6
22.5°	2266.4	2266.4	2264.6	2262.7	2262.7	2260.8	2260.8	2259.0
25°	2249.7	2247.8	2246.0	2244.1	2242.2	2242.2	2240.4	2238.5
27.5°	2231.1	2227.3	2225.5	2223.6	2221.8	2219.9	2218.0	2216.2
30°	2210.6	2206.9	2203.2	2201.3	2197.6	2193.9	2192.0	2190.1
32.5°	2190.1	2186.4	2180.8	2175.2	2171.5	2167.8	2164.1	2162.2
35°	2173.4	2165.9	2160.4	2152.9	2147.3	2141.7	2139.9	2138.0
37.5°	2160.4	2152.9	2143.6	2136.2	2130.6	2123.1	2119.4	2115.7
40°	2147.3	2138.0	2126.9	2117.6	2110.1	2100.8	2097.1	2093.4
42.5°	2128.7	2117.6	2106.4	2095.2	2084.1	2074.8	2069.2	2065.5
45°	2102.7	2091.5	2078.5	2063.6	2052.4	2041.3	2035.7	2032.0
47.5°	2067.3	2056.2	2041.3	2028.2	2015.2	2004.1	1996.6	1992.9
50°	2024.5	2013.4	1998.5	1983.6	1970.6	1957.5	1951.9	1946.4
52.5°	1970.6	1961.3	1944.5	1933.3	1918.5	1905.4	1899.8	1896.1
55°	1903.6	1894.3	1877.5	1866.4	1851.5	1840.3	1832.9	1827.3
57.5°	1821.7	1814.3	1795.6	1784.5	1769.6	1758.4	1752.8	1749.1
60°	1721.2	1713.8	1695.2	1684.0	1671.0	1657.9	1654.2	1650.5
62.5°	1596.5	1592.8	1577.9	1564.9	1551.9	1538.9	1535.1	1533.3
65°	1451.4	1447.7	1434.7	1423.5	1412.3	1401.2	1397.4	1393.7
67.5°	1285.8	1283.9	1272.8	1263.5	1256.0	1244.9	1243.0	1239.3
70°	1109.0	1105.3	1096.0	1088.6	1083.0	1073.7	1071.8	1068.1
72.5°	924.8	922.9	917.4	908.1	908.1	895.0	893.2	891.3
75°	722.0	731.3	723.8	720.1	720.1	712.7	712.7	710.8
77.5°	528.5	537.8	543.3	535.9	543.3	535.9	535.9	534.0
80°	361.0	368.4	374.0	368.4	377.7	372.2	372.2	379.6
82.5°	219.6	227.0	230.7	228.9	234.5	232.6	230.7	236.3
85°	107.9	111.6	113.5	113.5	115.4	111.6	115.4	117.2
87.5°	27.9	29.8	31.6	29.8	31.6	31.6	31.6	33.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)