

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: PORTFOLIO

Report Number: P244162

Luminaire Tested: **LSR8B40D010 EC8B40827 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244162
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40827 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4337.0 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

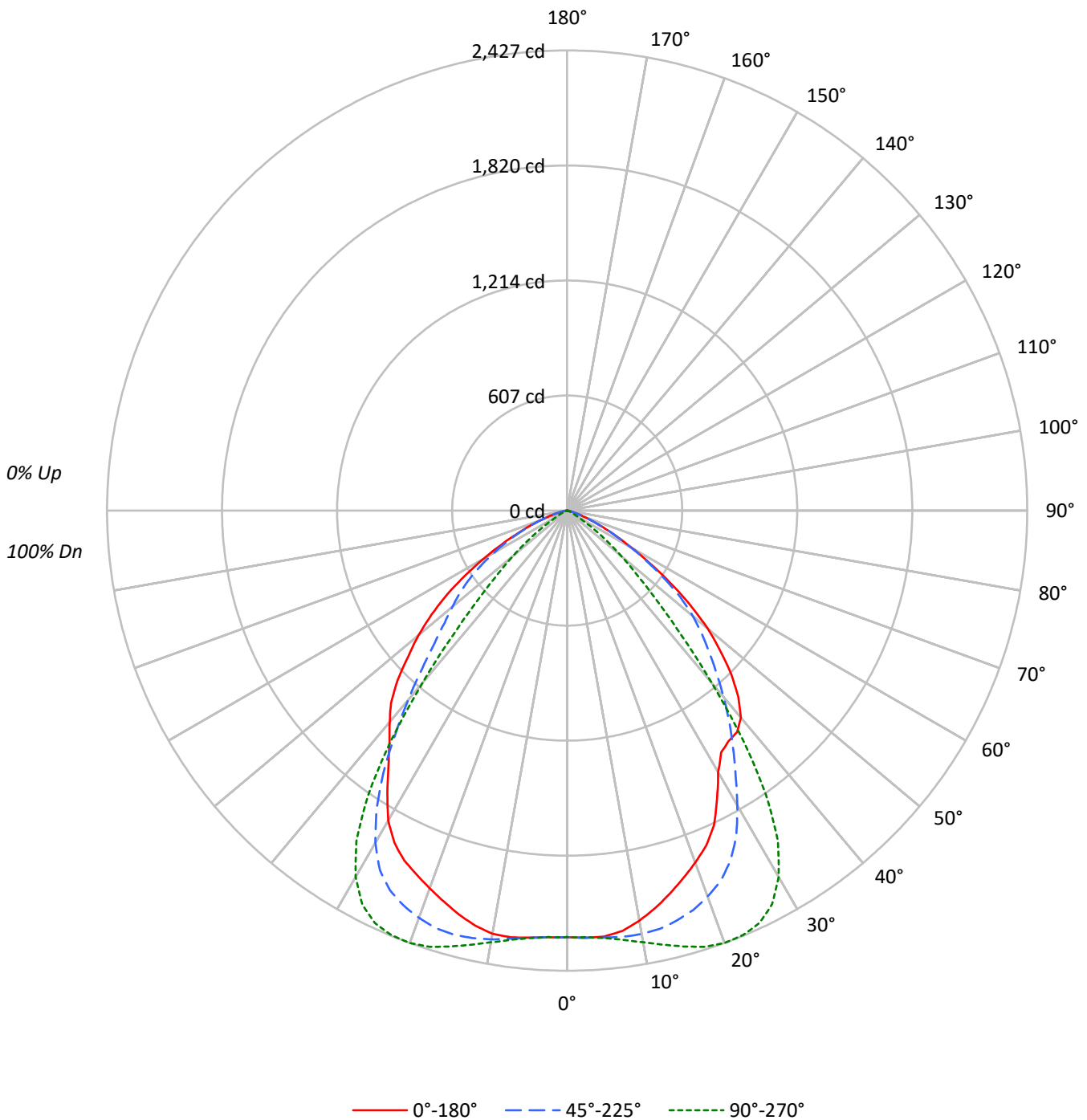
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P244162

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	69379	69379	69379
5°	69792	70049	69975
10°	68764	72393	70972
15°	66756	75983	70415
20°	64817	79630	69559
25°	62329	81671	69236
30°	56725	79431	67183
35°	55879	68825	61812
40°	57398	47737	58598
45°	53434	28852	55100
50°	46347	17817	49095
55°	35569	9311	41665
60°	24231	3756	31447
65°	15075	1919	21692
70°	8186	1181	13244
75°	4265	572	7828
80°	1918	639	4244
85°	1274	425	3821



TEST NUMBER: P244162

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.4	5.0
10°-20°	641.0	14.8
20°-30°	977.9	22.5
30°-40°	1020.4	23.5
40°-50°	766.5	17.7
50°-60°	471.6	10.9
60°-70°	191.9	4.4
70°-80°	45.2	1.0
80°-90°	6.2	0.1
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°-30°	1835.2	42.3
0°-40°	2855.6	65.8
0°-60°	4093.6	94.4
0°-90°	4337.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4337.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2250	2250	2250	2250	2250	
5°	2255	2261	2263	2261	2261	213
15°	2091	2238	2380	2314	2206	589
25°	1832	2037	2400	2210	2035	833
35°	1484	1526	1828	1690	1642	937
45°	1225	1060	662	988	1264	935
55°	662	628	173	628	775	595
65°	207	209	26	281	297	215
75°	36	36	5	63	66	43
85°	4	4	1	8	11	5
90°	0	0	0	0	0	



TEST NUMBER: P244162

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9
2.5°	2255.9	2252.3	2255.9	2255.9	2257.1	2254.7	2255.9	2257.1	2254.7	2254.7	2254.7
5°	2254.7	2252.3	2254.7	2253.5	2255.9	2255.9	2258.3	2258.3	2260.6	2260.6	2264.2
7.5°	2235.6	2230.8	2235.6	2239.2	2241.5	2246.3	2252.3	2257.1	2261.8	2266.6	2272.6
10°	2196.1	2196.1	2199.7	2206.9	2214.1	2222.4	2233.2	2245.1	2257.1	2267.8	2278.5
12.5°	2147.2	2143.6	2150.8	2160.3	2171.1	2184.2	2200.9	2218.9	2238.0	2259.4	2276.2
15°	2091.1	2087.5	2095.8	2105.4	2118.5	2137.6	2158.0	2181.8	2209.3	2238.0	2265.4
17.5°	2033.7	2032.5	2040.9	2054.0	2064.8	2085.1	2111.4	2140.0	2171.1	2209.3	2245.1
20°	1975.2	1974.0	1982.4	1993.2	2007.5	2026.6	2052.8	2086.3	2123.3	2166.3	2208.1
22.5°	1914.3	1915.5	1922.7	1934.6	1946.6	1966.9	1994.3	2027.8	2068.4	2114.9	2161.5
25°	1831.9	1826.0	1835.5	1847.5	1867.7	1884.5	1910.7	1946.6	1988.4	2037.3	2092.3
27.5°	1712.5	1711.3	1719.7	1730.4	1748.3	1768.6	1797.3	1834.3	1878.5	1932.2	1986.0
30°	1593.1	1595.5	1599.1	1609.8	1621.7	1642.0	1670.7	1701.8	1743.6	1794.9	1852.2
32.5°	1511.9	1511.9	1516.7	1523.8	1532.2	1542.9	1563.2	1585.9	1618.2	1654.0	1695.8
35°	1484.4	1479.6	1484.4	1485.6	1486.8	1489.2	1492.8	1499.9	1510.7	1526.2	1541.7
37.5°	1472.5	1468.9	1468.9	1464.1	1458.1	1451.0	1441.4	1430.7	1418.7	1403.2	1391.3
40°	1425.9	1423.5	1421.1	1416.3	1403.2	1388.9	1373.3	1348.3	1320.8	1282.6	1244.4
42.5°	1336.3	1333.9	1332.7	1323.2	1311.2	1294.5	1276.6	1250.3	1215.7	1166.7	1111.8
45°	1225.3	1220.5	1216.9	1208.6	1200.2	1185.9	1169.1	1145.2	1110.6	1060.5	994.8
47.5°	1096.3	1093.9	1092.7	1089.1	1080.8	1072.4	1061.7	1042.6	1011.5	963.7	895.7
50°	966.1	961.4	963.7	962.5	959.0	953.0	945.8	932.7	908.8	865.8	803.7
52.5°	816.8	816.8	815.7	819.2	820.4	819.2	820.4	806.1	785.8	753.5	701.0
55°	661.6	661.6	665.2	670.0	674.7	675.9	674.7	668.8	654.4	628.2	581.6
57.5°	515.9	513.5	520.7	527.8	532.6	537.4	533.8	529.0	520.7	499.2	463.3
60°	392.9	392.9	397.7	402.5	407.2	412.0	410.8	409.6	402.5	388.1	359.5
62.5°	289.0	290.2	290.2	293.8	298.5	303.3	306.9	303.3	299.7	290.2	271.1
65°	206.6	205.4	206.6	210.2	213.8	218.5	220.9	219.7	216.1	209.0	194.7
67.5°	138.5	137.3	142.1	143.3	145.7	150.5	149.3	150.5	149.3	143.3	131.4
70°	90.8	88.4	90.8	89.6	93.2	94.4	96.7	97.9	96.7	93.2	89.6
72.5°	56.1	54.9	56.1	57.3	58.5	59.7	62.1	62.1	60.9	58.5	53.7
75°	35.8	32.2	33.4	31.1	33.4	33.4	35.8	37.0	35.8	35.8	33.4
77.5°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	22.7	23.9	21.5	20.3
80°	10.8	10.8	12.0	12.0	12.0	13.1	12.0	12.0	12.0	13.1	9.6
82.5°	8.4	7.2	7.2	7.2	8.4	7.2	7.2	7.2	7.2	7.2	7.2
85°	3.6	4.8	3.6	2.4	3.6	3.6	4.8	3.6	3.6	3.6	4.8
87.5°	1.2	1.2	0.0	0.0	0.0	1.2	0.0	1.2	1.2	2.4	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P244162

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9
2.5°	2255.9	2253.5	2253.5	2252.3	2254.7	2252.3	2253.5	2252.3	2252.3	2254.7	2252.3
5°	2264.2	2265.4	2263.0	2261.8	2265.4	2265.4	2265.4	2263.0	2263.0	2264.2	2263.0
7.5°	2276.2	2278.5	2279.7	2280.9	2283.3	2284.5	2284.5	2283.3	2282.1	2285.7	2280.9
10°	2289.3	2292.9	2300.1	2303.6	2309.6	2309.6	2312.0	2312.0	2309.6	2312.0	2310.8
12.5°	2284.5	2306.0	2318.0	2326.3	2334.7	2341.8	2344.2	2345.4	2344.2	2349.0	2344.2
15°	2292.9	2310.8	2329.9	2344.2	2359.8	2368.1	2370.5	2380.1	2382.5	2383.7	2376.5
17.5°	2279.7	2312.0	2332.3	2353.8	2376.5	2392.0	2406.3	2412.3	2413.5	2415.9	2406.3
20°	2249.9	2285.7	2316.8	2347.8	2374.1	2398.0	2409.9	2426.6	2421.9	2431.4	2418.3
22.5°	2209.3	2249.9	2289.3	2329.9	2357.4	2386.0	2411.1	2423.0	2429.0	2429.0	2414.7
25°	2144.8	2192.6	2235.6	2277.4	2319.2	2353.8	2382.5	2400.4	2404.0	2402.8	2386.0
27.5°	2044.5	2095.8	2146.0	2193.8	2245.1	2285.7	2319.2	2340.6	2346.6	2346.6	2328.7
30°	1906.0	1960.9	2009.9	2067.2	2119.7	2165.1	2211.7	2230.8	2241.5	2241.5	2221.2
32.5°	1741.2	1787.7	1833.1	1889.2	1946.6	1997.9	2042.1	2068.4	2081.5	2080.3	2062.4
35°	1562.0	1584.7	1619.4	1661.1	1712.5	1760.3	1803.2	1828.3	1851.0	1849.8	1833.1
37.5°	1382.9	1376.9	1380.5	1396.0	1428.3	1461.7	1495.1	1519.1	1538.1	1546.5	1542.9
40°	1207.4	1176.3	1146.4	1135.7	1138.1	1150.0	1167.9	1185.9	1207.4	1218.1	1222.9
42.5°	1049.7	997.2	944.6	905.2	882.5	875.4	883.7	889.7	902.8	918.3	933.9
45°	923.1	852.7	783.4	722.5	684.3	661.6	656.8	661.6	668.8	684.3	704.6
47.5°	819.2	736.8	659.2	591.1	535.0	505.2	496.8	494.4	501.6	515.9	543.4
50°	727.3	644.9	558.9	480.1	421.6	388.1	376.2	371.4	379.7	390.5	415.6
52.5°	627.0	545.7	457.4	380.9	320.1	285.4	272.3	265.1	269.9	284.2	309.3
55°	518.3	443.0	363.0	284.2	225.7	193.5	177.9	173.2	177.9	193.5	218.5
57.5°	409.6	346.3	279.4	205.4	152.9	120.6	105.1	100.3	113.5	119.4	145.7
60°	320.1	268.7	211.4	150.5	105.1	80.0	64.5	60.9	66.9	77.6	99.1
62.5°	240.0	207.8	162.4	107.5	77.6	51.3	43.0	39.4	43.0	51.3	68.1
65°	174.4	149.3	113.5	78.8	52.5	38.2	28.7	26.3	29.9	35.8	50.2
67.5°	119.4	100.3	78.8	54.9	35.8	23.9	20.3	20.3	21.5	26.3	37.0
70°	77.6	65.7	50.2	35.8	23.9	17.9	15.5	13.1	15.5	19.1	25.1
72.5°	49.0	41.8	32.2	25.1	17.9	13.1	10.8	9.6	12.0	14.3	19.1
75°	29.9	22.7	16.7	13.1	9.6	9.6	9.6	4.8	6.0	9.6	12.0
77.5°	17.9	15.5	13.1	10.8	8.4	4.8	4.8	4.8	6.0	7.2	10.8
80°	9.6	8.4	6.0	6.0	4.8	3.6	4.8	3.6	2.4	6.0	7.2
82.5°	6.0	4.8	4.8	4.8	6.0	2.4	3.6	2.4	3.6	4.8	3.6
85°	3.6	3.6	3.6	2.4	6.0	2.4	2.4	1.2	1.2	2.4	2.4
87.5°	0.0	1.2	1.2	0.0	1.2	0.0	1.2	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P244162

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9	2249.9
2.5°	2253.5	2252.3	2253.5	2252.3	2252.3	2252.3	2253.5	2253.5	2252.3	2252.3	2254.7
5°	2263.0	2263.0	2263.0	2261.8	2260.6	2260.6	2263.0	2263.0	2259.4	2263.0	2263.0
7.5°	2283.3	2279.7	2283.3	2278.5	2276.2	2277.4	2278.5	2276.2	2273.8	2275.0	2275.0
10°	2309.6	2306.0	2306.0	2302.4	2298.9	2296.5	2294.1	2288.1	2282.1	2280.9	2276.2
12.5°	2340.6	2334.7	2331.1	2323.9	2318.0	2309.6	2302.4	2292.9	2280.9	2272.6	2264.2
15°	2371.7	2362.1	2353.8	2341.8	2328.7	2314.4	2298.9	2283.3	2264.2	2247.5	2233.2
17.5°	2396.8	2383.7	2368.1	2349.0	2329.9	2308.4	2285.7	2263.0	2235.6	2214.1	2197.3
20°	2405.1	2386.0	2365.7	2340.6	2315.6	2285.7	2257.1	2227.2	2196.1	2173.5	2154.4
22.5°	2394.4	2371.7	2346.6	2320.4	2286.9	2254.7	2221.2	2186.6	2159.1	2128.1	2110.2
25°	2364.5	2337.1	2309.6	2278.5	2246.3	2210.5	2174.7	2138.8	2105.4	2088.7	2066.0
27.5°	2303.6	2273.8	2243.9	2211.7	2174.7	2138.8	2101.8	2067.2	2038.5	2015.8	2002.7
30°	2196.1	2161.5	2126.9	2092.3	2060.0	2023.0	1988.4	1959.7	1931.0	1913.1	1900.0
32.5°	2031.3	2000.3	1965.7	1932.2	1902.4	1871.3	1842.7	1817.6	1797.3	1785.3	1775.8
35°	1809.2	1778.2	1751.9	1728.0	1702.9	1689.8	1671.9	1657.6	1649.2	1644.4	1643.2
37.5°	1529.8	1511.9	1503.5	1498.7	1494.0	1490.4	1492.8	1498.7	1503.5	1511.9	1521.4
40°	1231.2	1246.7	1251.5	1268.3	1283.8	1304.1	1326.8	1353.0	1374.5	1402.0	1421.1
42.5°	959.0	987.6	1021.0	1056.9	1095.1	1132.1	1177.5	1219.3	1257.5	1292.1	1322.0
45°	736.8	781.0	831.2	882.5	933.9	987.6	1042.6	1093.9	1139.3	1176.3	1207.4
47.5°	574.4	623.4	687.9	751.2	813.3	876.6	937.4	991.2	1029.4	1065.2	1092.7
50°	455.0	511.1	581.6	654.4	722.5	789.4	853.8	904.0	942.2	970.9	991.2
52.5°	352.3	419.2	490.8	567.3	640.1	712.9	772.6	819.2	850.3	875.4	890.9
55°	262.7	328.4	404.8	483.7	557.7	628.2	684.3	724.9	752.4	766.7	775.0
57.5°	189.9	249.6	326.0	404.8	471.7	538.6	584.0	621.0	636.5	644.9	648.5
60°	138.5	193.5	261.5	329.6	392.9	446.6	486.1	511.1	523.1	527.8	526.6
62.5°	101.5	149.3	207.8	265.1	316.5	360.6	391.7	408.4	414.4	416.8	413.2
65°	77.6	114.6	164.8	209.0	248.4	280.6	303.3	314.1	317.7	316.5	314.1
67.5°	57.3	86.0	123.0	156.4	185.1	210.2	222.1	231.7	234.1	230.5	226.9
70°	40.6	63.3	89.6	112.3	133.7	148.1	161.2	162.4	162.4	161.2	158.8
72.5°	28.7	44.2	60.9	76.4	89.6	100.3	105.1	108.7	107.5	106.3	103.9
75°	19.1	27.5	44.2	47.8	59.7	63.3	68.1	68.1	69.3	65.7	65.7
77.5°	12.0	19.1	26.3	31.1	35.8	40.6	43.0	43.0	44.2	43.0	43.0
80°	7.2	12.0	14.3	21.5	21.5	25.1	26.3	27.5	25.1	28.7	25.1
82.5°	4.8	7.2	10.8	10.8	13.1	15.5	15.5	16.7	16.7	15.5	15.5
85°	3.6	4.8	6.0	7.2	7.2	8.4	7.2	7.2	8.4	9.6	8.4
87.5°	1.2	2.4	1.2	2.4	2.4	4.8	3.6	3.6	3.6	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P244162

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2249.9	2249.9	2249.9	2249.9
2.5°	2252.3	2253.5	2252.3	2252.3
5°	2263.0	2261.8	2263.0	2260.6
7.5°	2271.4	2271.4	2270.2	2270.2
10°	2271.4	2266.6	2266.6	2266.6
12.5°	2253.5	2247.5	2243.9	2241.5
15°	2222.4	2211.7	2206.9	2205.7
17.5°	2181.8	2172.3	2166.3	2162.7
20°	2135.3	2125.7	2118.5	2119.7
22.5°	2094.6	2083.9	2079.1	2076.7
25°	2054.0	2040.9	2037.3	2034.9
27.5°	1988.4	1981.2	1977.6	1974.0
30°	1888.0	1884.5	1878.5	1886.8
32.5°	1772.2	1766.2	1761.5	1765.1
35°	1644.4	1640.8	1644.4	1642.0
37.5°	1527.4	1531.0	1535.8	1538.1
40°	1435.5	1448.6	1453.4	1455.7
42.5°	1343.5	1359.0	1368.6	1374.5
45°	1230.0	1245.5	1256.3	1263.5
47.5°	1113.0	1126.2	1136.9	1135.7
50°	1006.7	1013.9	1018.7	1023.4
52.5°	899.2	899.2	900.4	900.4
55°	777.4	775.0	773.8	775.0
57.5°	643.7	641.3	640.1	636.5
60°	521.9	514.7	509.9	509.9
62.5°	408.4	400.1	396.5	395.3
65°	306.9	305.7	298.5	297.3
67.5°	222.1	217.3	212.6	213.8
70°	156.4	149.3	149.3	146.9
72.5°	101.5	97.9	96.7	96.7
75°	63.3	63.3	60.9	65.7
77.5°	41.8	41.8	40.6	41.8
80°	25.1	25.1	25.1	23.9
82.5°	15.5	16.7	15.5	15.5
85°	8.4	9.6	7.2	10.8
87.5°	4.8	6.0	4.8	6.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)