

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: P245032

Luminaire Tested: **LSR8B40D010 EC8B40830 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40830 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4268.0 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

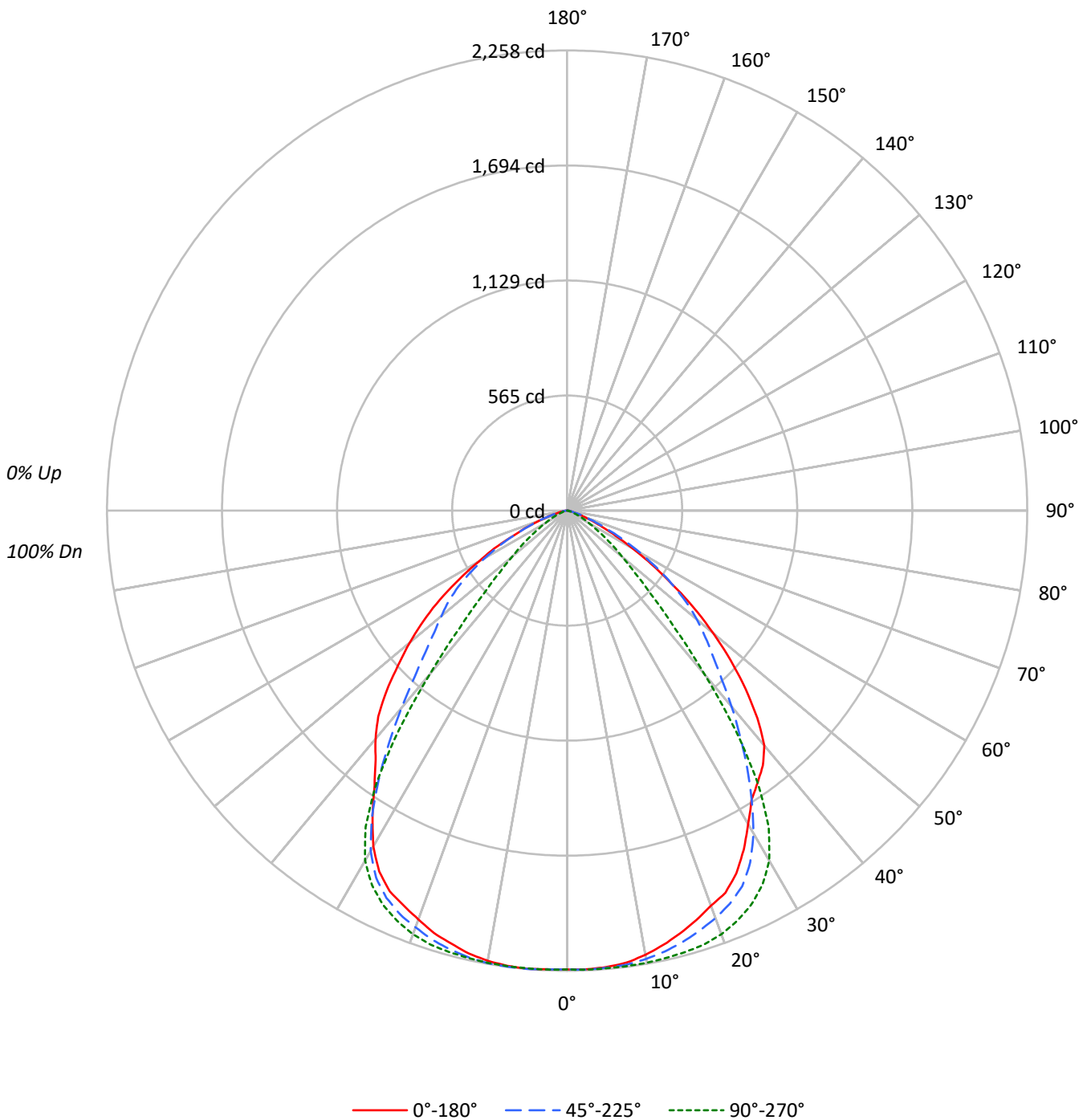
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	69440	69440	69440
5°	69591	69780	69854
10°	69300	70549	70245
15°	68531	71580	70230
20°	67708	72587	70048
25°	66830	72672	70120
30°	63223	70626	67745
35°	61337	61383	62019
40°	60578	42234	58875
45°	53979	25354	54716
50°	44883	16872	48361
55°	33660	11634	41004
60°	22813	7752	30935
65°	13761	5027	21255
70°	7627	2723	13073
75°	3455	1156	6767
80°	3001	1279	4724
85°	3432	1698	4706



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.9	5.0
10°-20°	624.1	14.6
20°-30°	947.3	22.2
30°-40°	995.0	23.3
40°-50°	746.0	17.5
50°-60°	478.6	11.2
60°-70°	204.7	4.8
70°-80°	48.4	1.1
80°-90°	9.0	0.2
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°	1786.4	41.9
0°-40°	2781.3	65.2
0°-60°	4005.9	93.9
0°-90°	4268.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4268.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2252	2252	2252	2252	2252	
5°	2248	2252	2254	2258	2257	214
15°	2147	2192	2242	2228	2200	605
25°	1964	2033	2136	2097	2061	897
35°	1629	1539	1631	1611	1648	1023
45°	1238	1012	581	983	1255	948
55°	626	626	216	653	763	568
65°	189	222	69	286	291	201
75°	29	34	10	58	57	42
85°	10	6	5	10	13	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9
2.5°	2253.1	2255.5	2254.3	2254.3	2253.1	2254.3	2254.3	2256.7	2256.7	2254.3	2253.1
5°	2248.2	2250.7	2250.7	2248.2	2248.2	2254.3	2250.7	2253.1	2253.1	2251.9	2251.9
7.5°	2237.4	2237.4	2242.2	2238.6	2238.6	2242.2	2241.0	2243.4	2245.8	2247.1	2247.1
10°	2213.2	2215.6	2216.8	2216.8	2218.0	2221.7	2224.1	2228.9	2231.3	2233.8	2235.0
12.5°	2183.0	2186.6	2187.8	2186.6	2190.2	2195.1	2201.1	2207.2	2210.8	2215.6	2219.3
15°	2146.7	2146.7	2149.1	2152.8	2155.2	2162.4	2168.5	2175.7	2185.4	2191.5	2197.5
17.5°	2106.8	2109.3	2112.9	2112.9	2117.7	2129.8	2133.4	2144.3	2155.2	2161.2	2173.3
20°	2063.3	2065.7	2069.4	2071.8	2077.8	2087.5	2094.7	2104.4	2116.5	2127.4	2139.5
22.5°	2029.5	2024.6	2027.0	2029.5	2035.5	2044.0	2052.4	2064.5	2076.6	2087.5	2099.6
25°	1964.2	1965.4	1969.0	1971.4	1978.7	1986.0	1995.6	2010.1	2021.0	2033.1	2046.4
27.5°	1876.0	1877.2	1883.2	1883.2	1889.3	1901.3	1907.4	1919.5	1934.0	1946.1	1961.8
30°	1775.6	1778.0	1778.0	1782.9	1786.5	1792.6	1798.6	1810.7	1817.9	1828.8	1850.6
32.5°	1683.8	1686.2	1685.0	1683.8	1680.1	1678.9	1677.7	1680.1	1682.6	1686.2	1694.6
35°	1629.4	1623.3	1618.5	1610.1	1600.4	1588.3	1577.4	1562.9	1549.6	1538.7	1526.6
37.5°	1577.4	1576.2	1568.9	1556.8	1537.5	1515.8	1490.4	1459.0	1427.5	1393.7	1361.1
40°	1504.9	1501.2	1495.2	1478.3	1456.5	1429.9	1396.1	1357.4	1306.6	1254.7	1201.5
42.5°	1381.6	1382.8	1375.5	1362.2	1341.7	1316.3	1281.3	1239.0	1184.6	1122.9	1054.0
45°	1237.8	1237.8	1235.3	1224.4	1210.0	1189.4	1162.8	1127.8	1074.6	1011.7	938.0
47.5°	1087.9	1089.1	1085.4	1083.0	1077.0	1063.7	1044.4	1017.8	980.3	919.8	846.1
50°	935.6	935.6	941.6	940.4	940.4	935.6	927.1	911.4	878.8	830.4	761.5
52.5°	783.3	785.7	789.3	794.1	800.2	809.8	800.2	792.9	772.4	734.9	675.7
55°	626.1	628.5	634.6	643.0	650.3	660.0	662.4	662.4	651.5	626.1	581.4
57.5°	492.0	488.3	493.2	500.4	510.1	519.8	527.0	535.5	534.3	517.3	481.1
60°	369.9	371.1	374.7	382.0	389.2	397.7	407.3	414.6	418.2	409.8	386.8
62.5°	269.6	269.6	274.4	281.6	285.3	297.4	303.4	307.0	310.6	309.4	294.9
65°	188.6	191.0	193.4	197.0	200.6	207.9	211.5	218.8	221.2	222.4	211.5
67.5°	133.0	129.3	131.8	134.2	137.8	142.6	149.9	149.9	153.5	153.5	146.3
70°	84.6	84.6	85.8	89.4	91.9	93.1	95.5	97.9	101.5	100.3	100.3
72.5°	56.8	55.6	56.8	58.0	59.2	62.8	62.8	64.1	66.5	67.7	62.8
75°	29.0	30.2	32.6	31.4	35.0	32.6	33.8	37.5	36.3	33.8	33.8
77.5°	24.2	24.2	24.2	23.0	25.4	25.4	24.2	26.6	25.4	25.4	24.2
80°	16.9	18.1	16.9	15.7	16.9	15.7	15.7	15.7	15.7	15.7	14.5
82.5°	13.3	10.9	12.1	10.9	12.1	12.1	10.9	9.7	9.7	10.9	9.7
85°	9.7	7.2	8.5	8.5	7.2	7.2	7.2	7.2	7.2	6.0	6.0
87.5°	6.0	3.6	3.6	3.6	4.8	4.8	4.8	3.6	4.8	4.8	2.4
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°	95°	100°	105°
0°	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9
2.5°	2255.5	2254.3	2256.7	2255.5	2255.5	2254.3	2255.5	2254.3	2256.7	2251.9	2253.1
5°	2255.5	2253.1	2254.3	2255.5	2256.7	2254.3	2254.3	2254.3	2256.7	2254.3	2255.5
7.5°	2250.7	2249.5	2253.1	2255.5	2254.3	2253.1	2255.5	2254.3	2256.7	2255.5	2257.9
10°	2241.0	2242.2	2244.6	2248.2	2249.5	2250.7	2253.1	2253.1	2256.7	2251.9	2254.3
12.5°	2226.5	2231.3	2237.4	2239.8	2244.6	2244.6	2247.1	2248.2	2250.7	2249.5	2253.1
15°	2208.4	2214.4	2221.7	2227.7	2233.8	2237.4	2241.0	2242.2	2245.8	2242.2	2243.4
17.5°	2186.6	2193.9	2204.7	2212.0	2221.7	2225.3	2230.1	2232.5	2236.2	2233.8	2235.0
20°	2156.4	2164.9	2176.9	2187.8	2193.9	2202.3	2208.4	2212.0	2214.4	2212.0	2213.2
22.5°	2114.1	2126.2	2141.9	2150.3	2162.4	2169.7	2170.9	2179.4	2185.4	2179.4	2181.8
25°	2064.5	2076.6	2088.7	2106.8	2117.7	2126.2	2134.6	2135.9	2141.9	2140.7	2139.5
27.5°	1982.3	1998.1	2018.6	2033.1	2047.6	2060.9	2070.6	2073.0	2079.0	2076.6	2077.8
30°	1869.9	1886.9	1906.2	1929.1	1949.7	1963.0	1975.1	1983.5	1989.6	1986.0	1984.8
32.5°	1710.4	1727.3	1747.8	1770.8	1795.0	1814.3	1828.8	1839.7	1847.0	1844.5	1838.5
35°	1527.9	1532.7	1546.0	1564.1	1584.6	1605.2	1618.5	1630.6	1639.0	1641.5	1641.5
37.5°	1340.5	1324.8	1315.1	1315.1	1327.2	1335.6	1347.7	1355.0	1368.3	1373.1	1376.8
40°	1159.2	1122.9	1089.1	1063.7	1046.8	1045.6	1045.6	1049.2	1061.3	1077.0	1091.5
42.5°	997.2	939.2	887.2	840.1	806.2	786.9	778.4	779.7	789.3	803.8	828.0
45°	867.9	795.4	730.1	673.3	627.3	597.1	582.6	581.4	588.6	605.6	632.2
47.5°	767.6	690.2	616.5	551.2	501.6	469.0	452.1	447.2	452.1	467.8	499.2
50°	684.1	604.4	528.2	460.5	407.3	373.5	357.8	351.7	357.8	371.1	402.5
52.5°	606.8	524.6	453.3	388.0	331.2	302.2	285.3	281.6	285.3	301.0	326.4
55°	517.3	447.2	377.1	311.8	262.3	233.3	220.0	216.4	220.0	234.5	261.1
57.5°	429.1	368.7	307.0	247.8	205.5	180.1	168.0	163.2	171.6	181.3	212.7
60°	346.9	298.6	246.6	194.6	159.6	136.6	126.9	125.7	128.1	140.2	162.0
62.5°	272.0	232.1	191.0	148.7	119.7	110.0	97.9	96.7	99.1	106.4	123.3
65°	195.8	170.4	139.0	108.8	85.8	72.5	67.7	68.9	71.3	76.2	91.9
67.5°	136.6	118.5	96.7	76.2	59.2	53.2	48.4	47.1	48.4	56.8	65.3
70°	91.9	81.0	65.3	58.0	41.1	32.6	33.8	30.2	35.0	35.0	42.3
72.5°	60.4	53.2	43.5	33.8	29.0	23.0	23.0	21.8	24.2	25.4	31.4
75°	31.4	24.2	24.2	16.9	12.1	6.0	10.9	9.7	8.5	9.7	12.1
77.5°	21.8	18.1	16.9	13.3	12.1	9.7	9.7	9.7	9.7	10.9	12.1
80°	13.3	13.3	9.7	8.5	7.2	6.0	7.2	7.2	7.2	7.2	8.5
82.5°	8.5	7.2	7.2	6.0	6.0	4.8	4.8	4.8	4.8	4.8	7.2
85°	7.2	4.8	4.8	3.6	4.8	8.5	3.6	4.8	4.8	4.8	3.6
87.5°	2.4	3.6	3.6	3.6	2.4	1.2	2.4	3.6	3.6	6.0	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9	2251.9
2.5°	2255.5	2256.7	2256.7	2255.5	2255.5	2253.1	2257.9	2254.3	2255.5	2260.3	2256.7
5°	2257.9	2259.1	2259.1	2257.9	2257.9	2257.9	2259.1	2259.1	2257.9	2256.7	2259.1
7.5°	2262.8	2261.6	2261.6	2259.1	2259.1	2256.7	2259.1	2255.5	2257.9	2255.5	2259.1
10°	2256.7	2257.9	2256.7	2255.5	2255.5	2254.3	2254.3	2250.7	2251.9	2248.2	2250.7
12.5°	2253.1	2251.9	2251.9	2249.5	2247.1	2244.6	2243.4	2239.8	2239.8	2231.3	2235.0
15°	2243.4	2244.6	2241.0	2236.2	2233.8	2227.7	2225.3	2220.4	2215.6	2209.6	2210.8
17.5°	2235.0	2231.3	2226.5	2221.7	2212.0	2207.2	2202.3	2195.1	2192.6	2185.4	2183.0
20°	2209.6	2207.2	2201.1	2192.6	2186.6	2175.7	2170.9	2163.7	2157.6	2150.3	2146.7
22.5°	2176.9	2174.5	2167.3	2158.8	2149.1	2144.3	2139.5	2126.2	2120.1	2112.9	2111.7
25°	2135.9	2132.2	2125.0	2115.3	2110.4	2097.2	2092.3	2082.6	2080.3	2073.0	2071.8
27.5°	2073.0	2068.2	2059.7	2047.6	2039.1	2030.7	2025.9	2018.6	2016.2	2008.9	2007.7
30°	1978.7	1972.7	1955.7	1950.9	1936.4	1927.9	1927.9	1918.3	1919.5	1914.7	1914.7
32.5°	1830.0	1820.4	1807.1	1797.4	1787.7	1782.9	1782.9	1779.3	1781.7	1781.7	1784.1
35°	1633.0	1619.7	1612.4	1606.4	1606.4	1611.2	1625.8	1629.4	1636.6	1642.7	1647.5
37.5°	1380.4	1379.2	1387.6	1394.9	1413.0	1433.6	1459.0	1480.7	1501.2	1515.8	1530.3
40°	1107.2	1137.4	1161.6	1195.5	1223.2	1263.1	1309.1	1346.5	1381.6	1407.0	1433.6
42.5°	864.2	902.9	953.7	1003.2	1052.8	1107.2	1167.7	1219.6	1265.6	1300.6	1328.4
45°	673.3	726.4	788.1	851.0	915.0	982.7	1045.6	1098.7	1147.1	1183.4	1211.2
47.5°	542.7	600.7	670.8	739.8	812.3	883.6	953.7	999.6	1039.5	1068.5	1093.9
50°	448.4	510.1	583.8	662.4	734.9	806.2	866.7	911.4	944.0	969.4	985.1
52.5°	374.7	440.0	518.6	597.1	669.6	734.9	789.3	823.2	849.7	867.9	882.4
55°	309.4	372.3	446.0	519.8	591.1	652.7	697.4	722.8	743.4	754.2	762.7
57.5°	252.6	310.6	378.3	446.0	507.7	558.5	593.5	618.9	628.5	637.0	635.8
60°	198.2	252.6	314.3	372.3	425.5	466.6	492.0	506.5	513.7	517.3	514.9
62.5°	155.9	205.5	252.6	303.4	342.1	377.1	401.3	401.3	404.9	406.1	409.8
65°	116.0	153.5	194.6	232.1	263.5	286.5	299.8	303.4	308.2	307.0	304.6
67.5°	85.8	113.6	143.8	171.6	193.4	207.9	217.6	226.0	224.8	222.4	221.2
70°	59.2	77.4	104.0	120.9	136.6	151.1	153.5	154.7	155.9	157.1	154.7
72.5°	41.1	54.4	68.9	83.4	93.1	99.1	105.2	106.4	106.4	106.4	105.2
75°	20.6	27.8	41.1	47.1	55.6	58.0	62.8	62.8	66.5	61.6	60.4
77.5°	18.1	21.8	29.0	33.8	37.5	41.1	42.3	45.9	44.7	42.3	43.5
80°	10.9	13.3	18.1	20.6	25.4	26.6	27.8	29.0	27.8	29.0	29.0
82.5°	8.5	9.7	12.1	12.1	15.7	15.7	16.9	16.9	18.1	18.1	18.1
85°	4.8	8.5	7.2	14.5	9.7	9.7	12.1	14.5	12.1	12.1	14.5
87.5°	4.8	4.8	3.6	4.8	4.8	4.8	6.0	7.2	7.2	8.5	7.2
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: P245032

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2251.9	2251.9	2251.9	2251.9
2.5°	2255.5	2257.9	2254.3	2253.1
5°	2259.1	2259.1	2256.7	2256.7
7.5°	2259.1	2259.1	2255.5	2253.1
10°	2249.5	2249.5	2245.8	2243.4
12.5°	2231.3	2231.3	2230.1	2226.5
15°	2208.4	2208.4	2203.5	2199.9
17.5°	2176.9	2179.4	2173.3	2173.3
20°	2143.1	2141.9	2137.1	2134.6
22.5°	2108.1	2105.6	2104.4	2097.2
25°	2070.6	2068.2	2064.5	2060.9
27.5°	2006.5	2005.3	2001.7	1996.8
30°	1908.6	1907.4	1902.6	1902.6
32.5°	1781.7	1780.5	1775.6	1776.9
35°	1649.9	1654.8	1652.3	1647.5
37.5°	1539.9	1543.6	1546.0	1543.6
40°	1448.1	1459.0	1460.2	1462.6
42.5°	1350.2	1364.7	1369.5	1371.9
45°	1232.9	1246.2	1257.1	1254.7
47.5°	1113.2	1122.9	1132.6	1125.3
50°	998.4	1004.5	1008.1	1008.1
52.5°	889.6	889.6	888.4	889.6
55°	765.1	765.1	760.3	762.7
57.5°	634.6	637.0	633.4	627.3
60°	513.7	507.7	505.2	501.6
62.5°	400.1	400.1	391.6	402.5
65°	299.8	296.1	292.5	291.3
67.5°	217.6	216.4	212.7	211.5
70°	153.5	148.7	147.5	145.0
72.5°	102.7	102.7	100.3	100.3
75°	62.8	56.8	55.6	56.8
77.5°	43.5	42.3	42.3	41.1
80°	29.0	27.8	30.2	26.6
82.5°	18.1	19.3	18.1	19.3
85°	12.1	14.5	13.3	13.3
87.5°	7.2	7.2	7.2	7.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)