

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: P249175

Luminaire Tested: **LSR8B90D010 EC8B909727 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249175
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: LSR8B90D010 EC8B909727 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6656.0 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

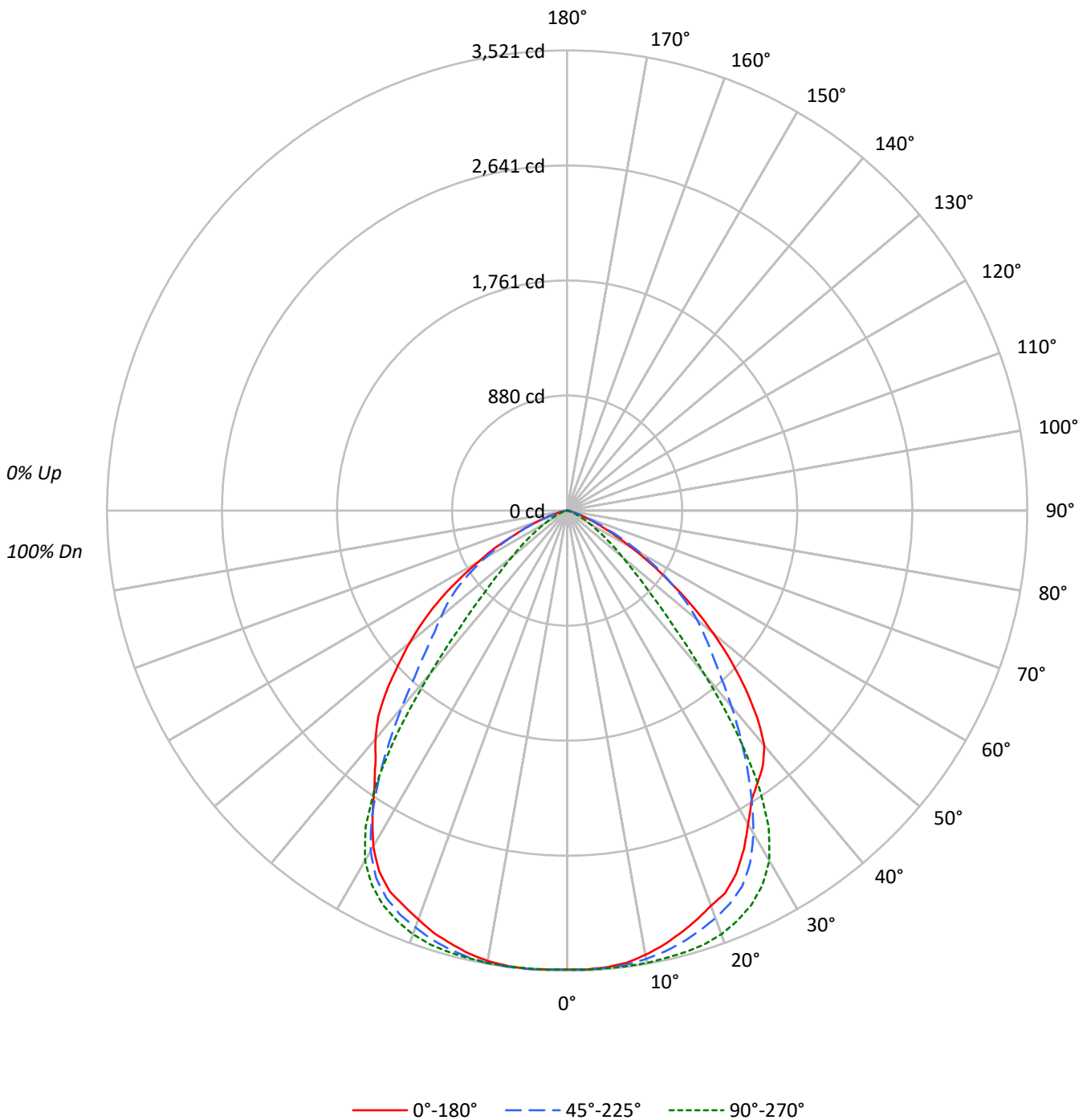
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.2	5.0
10°-20°	973.3	14.6
20°-30°	1477.3	22.2
30°-40°	1551.7	23.3
40°-50°	1163.3	17.5
50°-60°	746.4	11.2
60°-70°	319.3	4.8
70°-80°	75.4	1.1
80°-90°	14.0	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°	2785.8	41.9
0°-40°	4337.5	65.2
0°-60°	6247.2	93.9
0°-90°	6656.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6656.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3512	3512	3512	3512	3512	
5°	3506	3512	3516	3521	3519	333
15°	3348	3418	3497	3474	3431	944
25°	3063	3171	3331	3271	3214	1399
35°	2541	2400	2543	2513	2569	1595
45°	1930	1578	907	1533	1957	1478
55°	976	976	337	1018	1189	886
65°	294	347	108	447	454	314
75°	45	53	15	90	89	66
85°	15	9	8	15	21	16
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°	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8
2.5°	3513.7	3517.5	3515.6	3515.6	3513.7	3515.6	3515.6	3519.4	3519.4	3515.6	3513.7
5°	3506.2	3509.9	3509.9	3506.2	3506.2	3515.6	3509.9	3513.7	3513.7	3511.8	3511.8
7.5°	3489.2	3489.2	3496.8	3491.1	3491.1	3496.8	3494.9	3498.6	3502.4	3504.3	3504.3
10°	3451.5	3455.3	3457.2	3457.2	3459.1	3464.7	3468.5	3476.0	3479.8	3483.6	3485.5
12.5°	3404.4	3410.0	3411.9	3410.0	3415.7	3423.2	3432.7	3442.1	3447.8	3455.3	3461.0
15°	3347.8	3347.8	3351.6	3357.3	3361.1	3372.4	3381.8	3393.1	3408.2	3417.6	3427.0
17.5°	3285.6	3289.4	3295.1	3295.1	3302.6	3321.4	3327.1	3344.1	3361.1	3370.5	3389.3
20°	3217.8	3221.5	3227.2	3231.0	3240.4	3255.5	3266.8	3281.9	3300.7	3317.7	3336.5
22.5°	3165.0	3157.5	3161.2	3165.0	3174.4	3187.6	3200.8	3219.6	3238.5	3255.5	3274.3
25°	3063.2	3065.1	3070.8	3074.5	3085.8	3097.1	3112.2	3134.8	3151.8	3170.7	3191.4
27.5°	2925.6	2927.5	2936.9	2936.9	2946.3	2965.2	2974.6	2993.4	3016.1	3034.9	3059.5
30°	2769.1	2772.9	2772.9	2780.4	2786.1	2795.5	2804.9	2823.8	2835.1	2852.1	2886.0
32.5°	2625.9	2629.6	2627.7	2625.9	2620.2	2618.3	2616.4	2620.2	2624.0	2629.6	2642.8
35°	2541.1	2531.6	2524.1	2510.9	2495.8	2477.0	2460.0	2437.4	2416.6	2399.6	2380.8
37.5°	2460.0	2458.1	2446.8	2427.9	2397.8	2363.9	2324.3	2275.3	2226.2	2173.5	2122.6
40°	2346.9	2341.2	2331.8	2305.4	2271.5	2230.0	2177.2	2116.9	2037.7	1956.7	1873.7
42.5°	2154.6	2156.5	2145.2	2124.4	2092.4	2052.8	1998.1	1932.2	1847.4	1751.2	1643.8
45°	1930.3	1930.3	1926.5	1909.5	1886.9	1854.9	1813.4	1758.8	1675.8	1577.8	1462.8
47.5°	1696.5	1698.4	1692.8	1689.0	1679.6	1658.8	1628.7	1587.2	1528.8	1434.5	1319.5
50°	1459.0	1459.0	1468.5	1466.6	1466.6	1459.0	1445.8	1421.3	1370.4	1295.0	1187.6
52.5°	1221.5	1225.3	1231.0	1238.5	1247.9	1263.0	1247.9	1236.6	1204.5	1146.1	1053.7
55°	976.4	980.2	989.6	1002.8	1014.2	1029.3	1033.0	1033.0	1016.0	976.4	906.7
57.5°	767.2	761.6	769.1	780.4	795.5	810.6	821.9	835.1	833.2	806.8	750.3
60°	576.8	578.7	584.3	595.7	607.0	620.2	635.3	646.6	652.2	639.0	603.2
62.5°	420.4	420.4	427.9	439.2	444.9	463.7	473.1	478.8	484.4	482.6	459.9
65°	294.1	297.8	301.6	307.3	312.9	324.2	329.9	341.2	345.0	346.9	329.9
67.5°	207.4	201.7	205.5	209.2	214.9	222.5	233.8	233.8	239.4	239.4	228.1
70°	132.0	132.0	133.9	139.5	143.3	145.2	148.9	152.7	158.3	156.5	156.5
72.5°	88.6	86.7	88.6	90.5	92.4	98.0	98.0	99.9	103.7	105.6	98.0
75°	45.2	47.1	50.9	49.0	54.7	50.9	52.8	58.4	56.5	52.8	52.8
77.5°	37.7	37.7	37.7	35.8	39.6	39.6	37.7	41.5	39.6	39.6	37.7
80°	26.4	28.3	26.4	24.5	26.4	24.5	24.5	24.5	24.5	24.5	22.6
82.5°	20.8	17.0	18.9	17.0	18.9	18.9	17.0	15.1	15.1	17.0	15.1
85°	15.1	11.3	13.2	13.2	11.3	11.3	11.3	11.3	11.3	9.4	9.4
87.5°	9.4	5.7	5.7	5.7	7.5	7.5	7.5	5.7	7.5	7.5	3.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8
2.5°	3517.5	3515.6	3519.4	3517.5	3517.5	3515.6	3517.5	3515.6	3519.4	3511.8	3513.7
5°	3517.5	3513.7	3515.6	3517.5	3519.4	3515.6	3515.6	3515.6	3519.4	3515.6	3517.5
7.5°	3509.9	3508.1	3513.7	3517.5	3515.6	3513.7	3517.5	3515.6	3519.4	3517.5	3521.2
10°	3494.9	3496.8	3500.5	3506.2	3508.1	3509.9	3513.7	3513.7	3519.4	3511.8	3515.6
12.5°	3472.3	3479.8	3489.2	3493.0	3500.5	3500.5	3504.3	3506.2	3509.9	3508.1	3513.7
15°	3444.0	3453.4	3464.7	3474.2	3483.6	3489.2	3494.9	3496.8	3502.4	3496.8	3498.6
17.5°	3410.0	3421.3	3438.3	3449.6	3464.7	3470.4	3477.9	3481.7	3487.3	3483.6	3485.5
20°	3362.9	3376.1	3395.0	3411.9	3421.3	3434.5	3444.0	3449.6	3453.4	3449.6	3451.5
22.5°	3296.9	3315.8	3340.3	3353.5	3372.4	3383.7	3385.5	3398.7	3408.2	3398.7	3402.5
25°	3219.6	3238.5	3257.4	3285.6	3302.6	3315.8	3329.0	3330.9	3340.3	3338.4	3336.5
27.5°	3091.5	3116.0	3148.0	3170.7	3193.3	3214.0	3229.1	3232.8	3242.3	3238.5	3240.4
30°	2916.1	2942.6	2972.7	3008.5	3040.6	3061.3	3080.2	3093.4	3102.8	3097.1	3095.2
32.5°	2667.4	2693.7	2725.8	2761.6	2799.3	2829.4	2852.1	2869.1	2880.4	2876.6	2867.2
35°	2382.7	2390.2	2411.0	2439.3	2471.3	2503.3	2524.1	2542.9	2556.1	2559.9	2559.9
37.5°	2090.5	2066.0	2050.9	2050.9	2069.8	2083.0	2101.8	2113.1	2133.9	2141.4	2147.1
40°	1807.7	1751.2	1698.4	1658.8	1632.5	1630.6	1630.6	1636.2	1655.1	1679.6	1702.2
42.5°	1555.2	1464.7	1383.6	1310.1	1257.3	1227.2	1214.0	1215.9	1231.0	1253.6	1291.2
45°	1353.5	1240.4	1138.6	1050.0	978.3	931.2	908.6	906.7	918.0	944.4	985.9
47.5°	1197.0	1076.4	961.4	859.6	782.3	731.4	705.0	697.5	705.0	729.5	778.5
50°	1066.9	942.5	823.8	718.2	635.3	582.5	558.0	548.6	558.0	578.7	627.7
52.5°	946.3	818.1	706.9	605.1	516.5	471.2	444.9	439.2	444.9	469.4	509.0
55°	806.8	697.5	588.1	486.3	409.1	363.8	343.1	337.4	343.1	365.7	407.2
57.5°	669.2	574.9	478.8	386.4	320.5	280.9	262.0	254.5	267.7	282.7	331.8
60°	541.0	465.6	384.5	303.5	248.8	213.0	197.9	196.0	199.8	218.7	252.6
62.5°	424.2	361.9	297.8	231.9	186.6	171.5	152.7	150.8	154.6	165.9	192.3
65°	305.4	265.8	216.8	169.6	133.9	113.1	105.6	107.5	111.2	118.8	143.3
67.5°	213.0	184.7	150.8	118.8	92.4	82.9	75.4	73.5	75.4	88.6	101.8
70°	143.3	126.3	101.8	90.5	64.1	50.9	52.8	47.1	54.7	54.7	66.0
72.5°	94.2	82.9	67.8	52.8	45.2	35.8	35.8	33.9	37.7	39.6	49.0
75°	49.0	37.7	37.7	26.4	18.9	9.4	17.0	15.1	13.2	15.1	18.9
77.5°	33.9	28.3	26.4	20.8	18.9	15.1	15.1	15.1	15.1	17.0	18.9
80°	20.8	20.8	15.1	13.2	11.3	9.4	11.3	11.3	11.3	11.3	13.2
82.5°	13.2	11.3	11.3	9.4	9.4	7.5	7.5	7.5	7.5	7.5	11.3
85°	11.3	7.5	7.5	5.7	7.5	13.2	5.7	7.5	7.5	7.5	5.7
87.5°	3.8	5.7	5.7	5.7	3.8	1.9	3.8	5.7	5.7	9.4	7.5
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°	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8	3511.8
2.5°	3517.5	3519.4	3519.4	3517.5	3517.5	3513.7	3521.2	3515.6	3517.5	3525.0	3519.4
5°	3521.2	3523.1	3523.1	3521.2	3521.2	3521.2	3523.1	3523.1	3521.2	3519.4	3523.1
7.5°	3528.8	3526.9	3526.9	3523.1	3523.1	3519.4	3523.1	3517.5	3521.2	3517.5	3523.1
10°	3519.4	3521.2	3519.4	3517.5	3517.5	3515.6	3515.6	3509.9	3511.8	3506.2	3509.9
12.5°	3513.7	3511.8	3511.8	3508.1	3504.3	3500.5	3498.6	3493.0	3493.0	3479.8	3485.5
15°	3498.6	3500.5	3494.9	3487.3	3483.6	3474.2	3470.4	3462.8	3455.3	3445.9	3447.8
17.5°	3485.5	3479.8	3472.3	3464.7	3449.6	3442.1	3434.5	3423.2	3419.5	3408.2	3404.4
20°	3445.9	3442.1	3432.7	3419.5	3410.0	3393.1	3385.5	3374.2	3364.8	3353.5	3347.8
22.5°	3395.0	3391.2	3379.9	3366.7	3351.6	3344.1	3336.5	3315.8	3306.4	3295.1	3293.2
25°	3330.9	3325.2	3313.9	3298.8	3291.3	3270.6	3263.0	3247.9	3244.2	3232.8	3231.0
27.5°	3232.8	3225.3	3212.1	3193.3	3180.1	3166.9	3159.4	3148.0	3144.3	3132.9	3131.1
30°	3085.8	3076.4	3050.0	3042.5	3019.8	3006.6	3006.6	2991.6	2993.4	2985.9	2985.9
32.5°	2854.0	2838.9	2818.1	2803.0	2788.0	2780.4	2780.4	2774.8	2778.6	2778.6	2782.3
35°	2546.7	2526.0	2514.6	2505.2	2505.2	2512.7	2535.4	2541.1	2552.4	2561.8	2569.3
37.5°	2152.7	2150.9	2164.0	2175.3	2203.6	2235.7	2275.3	2309.2	2341.2	2363.9	2386.5
40°	1726.7	1773.8	1811.5	1864.3	1907.6	1969.9	2041.5	2099.9	2154.6	2194.2	2235.7
42.5°	1347.8	1408.1	1487.3	1564.6	1641.9	1726.7	1821.0	1902.0	1973.6	2028.3	2071.7
45°	1050.0	1132.9	1229.1	1327.1	1427.0	1532.6	1630.6	1713.5	1788.9	1845.5	1888.8
47.5°	846.4	936.9	1046.2	1153.7	1266.7	1378.0	1487.3	1558.9	1621.1	1666.4	1706.0
50°	699.3	795.5	910.5	1033.0	1146.1	1257.3	1351.6	1421.3	1472.2	1511.8	1536.3
52.5°	584.3	686.1	808.7	931.2	1044.3	1146.1	1231.0	1283.7	1325.2	1353.5	1376.1
55°	482.6	580.6	695.6	810.6	921.8	1017.9	1087.7	1127.3	1159.3	1176.3	1189.4
57.5°	394.0	484.4	590.0	695.6	791.7	870.9	925.6	965.1	980.2	993.4	991.5
60°	309.2	394.0	490.1	580.6	663.5	727.6	767.2	789.8	801.1	806.8	803.0
62.5°	243.2	320.5	394.0	473.1	533.5	588.1	625.9	625.9	631.5	633.4	639.0
65°	180.9	239.4	303.5	361.9	410.9	446.8	467.5	473.1	480.7	478.8	475.0
67.5°	133.9	177.2	224.3	267.7	301.6	324.2	339.3	352.5	350.6	346.9	345.0
70°	92.4	120.7	162.1	188.5	213.0	235.6	239.4	241.3	243.2	245.1	241.3
72.5°	64.1	84.8	107.5	130.1	145.2	154.6	164.0	165.9	165.9	165.9	164.0
75°	32.1	43.4	64.1	73.5	86.7	90.5	98.0	98.0	103.7	96.1	94.2
77.5°	28.3	33.9	45.2	52.8	58.4	64.1	66.0	71.6	69.7	66.0	67.8
80°	17.0	20.8	28.3	32.1	39.6	41.5	43.4	45.2	43.4	45.2	45.2
82.5°	13.2	15.1	18.9	18.9	24.5	24.5	26.4	26.4	28.3	28.3	28.3
85°	7.5	13.2	11.3	22.6	15.1	15.1	18.9	22.6	18.9	18.9	22.6
87.5°	7.5	7.5	5.7	7.5	7.5	7.5	9.4	11.3	11.3	13.2	11.3
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: P249175

CATALOG NUMBER: LSR8B90D010 EC8B909727 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3511.8	3511.8	3511.8	3511.8
2.5°	3517.5	3521.2	3515.6	3513.7
5°	3523.1	3523.1	3519.4	3519.4
7.5°	3523.1	3523.1	3517.5	3513.7
10°	3508.1	3508.1	3502.4	3498.6
12.5°	3479.8	3479.8	3477.9	3472.3
15°	3444.0	3444.0	3436.4	3430.8
17.5°	3395.0	3398.7	3389.3	3389.3
20°	3342.2	3340.3	3332.8	3329.0
22.5°	3287.5	3283.8	3281.9	3270.6
25°	3229.1	3225.3	3219.6	3214.0
27.5°	3129.2	3127.3	3121.6	3114.1
30°	2976.5	2974.6	2967.1	2967.1
32.5°	2778.6	2776.7	2769.1	2771.0
35°	2573.1	2580.6	2576.9	2569.3
37.5°	2401.5	2407.2	2411.0	2407.2
40°	2258.3	2275.3	2277.1	2280.9
42.5°	2105.6	2128.2	2135.8	2139.5
45°	1922.7	1943.5	1960.5	1956.7
47.5°	1736.1	1751.2	1766.3	1755.0
50°	1557.1	1566.5	1572.1	1572.1
52.5°	1387.4	1387.4	1385.5	1387.4
55°	1193.2	1193.2	1185.7	1189.4
57.5°	989.6	993.4	987.7	978.3
60°	801.1	791.7	787.9	782.3
62.5°	624.0	624.0	610.8	627.7
65°	467.5	461.8	456.2	454.3
67.5°	339.3	337.4	331.8	329.9
70°	239.4	231.9	230.0	226.2
72.5°	160.2	160.2	156.5	156.5
75°	98.0	88.6	86.7	88.6
77.5°	67.8	66.0	66.0	64.1
80°	45.2	43.4	47.1	41.5
82.5°	28.3	30.2	28.3	30.2
85°	18.9	22.6	20.8	20.8
87.5°	11.3	11.3	11.3	11.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)