

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: P246104

Luminaire Tested: **LSR8B20D010 EC8B20827 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246104  
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: LSR8B20D010 EC8B20827 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1847.0 lumens  
Efficiency: N/A  
Efficacy: 86.7 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

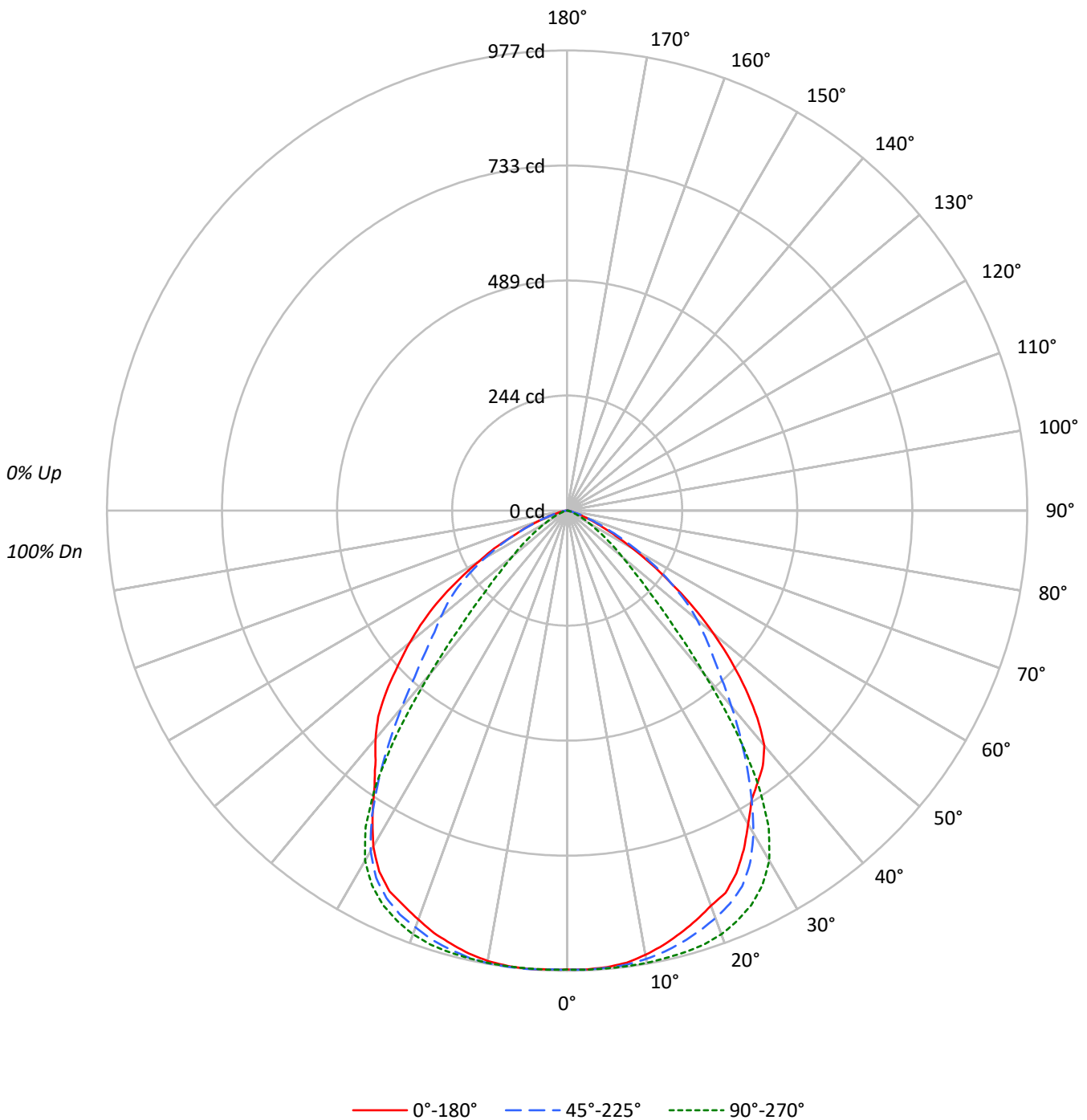
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	30050	30050	30050
5°	30115	30199	30230
10°	29991	30529	30401
15°	29657	30976	30392
20°	29301	31411	30315
25°	28920	31448	30346
30°	27360	30565	29315
35°	26543	26562	26840
40°	26213	18275	25477
45°	23357	10972	23680
50°	19424	7301	20931
55°	14569	5032	17747
60°	9874	3355	13389
65°	5954	2174	9201
70°	3300	1181	5662
75°	1501	500	2931
80°	1296	550	2042
85°	1486	743	2052



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.0	5.0
10°-20°	270.1	14.6
20°-30°	410.0	22.2
30°-40°	430.6	23.3
40°-50°	322.8	17.5
50°-60°	207.1	11.2
60°-70°	88.6	4.8
70°-80°	20.9	1.1
80°-90°	3.9	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°	773.1	41.9
0°-40°	1203.6	65.2
0°-60°	1733.6	93.9
0°-90°	1847.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1847.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	974	974	974	974	974	
5°	973	974	976	977	977	92
15°	929	948	970	964	952	262
25°	850	880	924	908	892	388
35°	705	666	706	697	713	443
45°	536	438	252	425	543	410
55°	271	271	94	282	330	246
65°	82	96	30	124	126	87
75°	13	15	4	25	25	18
85°	4	3	2	4	6	4
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°	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	975.0	976.1	975.6	975.6	975.0	975.6	975.6	976.6	976.6	975.6	975.0
5°	972.9	974.0	974.0	972.9	972.9	975.6	974.0	975.0	975.0	974.5	974.5
7.5°	968.2	968.2	970.3	968.8	968.8	970.3	969.8	970.9	971.9	972.4	972.4
10°	957.8	958.8	959.3	959.3	959.9	961.4	962.5	964.6	965.6	966.7	967.2
12.5°	944.7	946.3	946.8	946.3	947.8	949.9	952.5	955.2	956.7	958.8	960.4
15°	929.0	929.0	930.0	931.6	932.7	935.8	938.4	941.6	945.7	948.4	951.0
17.5°	911.7	912.8	914.4	914.4	916.5	921.7	923.3	928.0	932.7	935.3	940.5
20°	892.9	894.0	895.5	896.6	899.2	903.4	906.5	910.7	915.9	920.6	925.9
22.5°	878.3	876.2	877.2	878.3	880.9	884.5	888.2	893.4	898.7	903.4	908.6
25°	850.0	850.5	852.1	853.2	856.3	859.4	863.6	869.9	874.6	879.8	885.6
27.5°	811.8	812.4	815.0	815.0	817.6	822.8	825.4	830.7	836.9	842.2	849.0
30°	768.4	769.5	769.5	771.6	773.1	775.7	778.4	783.6	786.7	791.4	800.9
32.5°	728.7	729.7	729.2	728.7	727.1	726.6	726.0	727.1	728.1	729.7	733.4
35°	705.1	702.5	700.4	696.8	692.6	687.3	682.6	676.4	670.6	665.9	660.7
37.5°	682.6	682.1	679.0	673.7	665.4	656.0	645.0	631.4	617.8	603.1	589.0
40°	651.2	649.7	647.1	639.7	630.3	618.8	604.2	587.4	565.5	543.0	520.0
42.5°	597.9	598.4	595.3	589.5	580.6	569.6	554.5	536.2	512.6	485.9	456.1
45°	535.6	535.6	534.6	529.9	523.6	514.7	503.2	488.0	465.0	437.8	405.9
47.5°	470.8	471.3	469.7	468.7	466.1	460.3	452.0	440.4	424.2	398.1	366.2
50°	404.9	404.9	407.5	407.0	407.0	404.9	401.2	394.4	380.3	359.4	329.6
52.5°	339.0	340.0	341.6	343.7	346.3	350.5	346.3	343.1	334.2	318.0	292.4
55°	271.0	272.0	274.6	278.3	281.4	285.6	286.6	286.6	281.9	271.0	251.6
57.5°	212.9	211.3	213.4	216.6	220.7	224.9	228.1	231.7	231.2	223.9	208.2
60°	160.1	160.6	162.2	165.3	168.4	172.1	176.3	179.4	181.0	177.3	167.4
62.5°	116.7	116.7	118.7	121.9	123.4	128.7	131.3	132.9	134.4	133.9	127.6
65°	81.6	82.6	83.7	85.3	86.8	90.0	91.5	94.7	95.7	96.2	91.5
67.5°	57.5	56.0	57.0	58.1	59.6	61.7	64.9	64.9	66.4	66.4	63.3
70°	36.6	36.6	37.1	38.7	39.8	40.3	41.3	42.4	43.9	43.4	43.4
72.5°	24.6	24.1	24.6	25.1	25.6	27.2	27.2	27.7	28.8	29.3	27.2
75°	12.6	13.1	14.1	13.6	15.2	14.1	14.6	16.2	15.7	14.6	14.6
77.5°	10.5	10.5	10.5	9.9	11.0	11.0	10.5	11.5	11.0	11.0	10.5
80°	7.3	7.8	7.3	6.8	7.3	6.8	6.8	6.8	6.8	6.8	6.3
82.5°	5.8	4.7	5.2	4.7	5.2	5.2	4.7	4.2	4.2	4.7	4.2
85°	4.2	3.1	3.7	3.7	3.1	3.1	3.1	3.1	3.1	2.6	2.6
87.5°	2.6	1.6	1.6	1.6	2.1	2.1	2.1	1.6	2.1	2.1	1.0
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°	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	976.1	975.6	976.6	976.1	976.1	975.6	976.1	975.6	976.6	974.5	975.0
5°	976.1	975.0	975.6	976.1	976.6	975.6	975.6	975.6	976.6	975.6	976.1
7.5°	974.0	973.5	975.0	976.1	975.6	975.0	976.1	975.6	976.6	976.1	977.1
10°	969.8	970.3	971.4	972.9	973.5	974.0	975.0	975.0	976.6	974.5	975.6
12.5°	963.5	965.6	968.2	969.3	971.4	971.4	972.4	972.9	974.0	973.5	975.0
15°	955.7	958.3	961.4	964.1	966.7	968.2	969.8	970.3	971.9	970.3	970.9
17.5°	946.3	949.4	954.1	957.2	961.4	963.0	965.1	966.1	967.7	966.7	967.2
20°	933.2	936.9	942.1	946.8	949.4	953.1	955.7	957.2	958.3	957.2	957.8
22.5°	914.9	920.1	926.9	930.6	935.8	938.9	939.5	943.1	945.7	943.1	944.2
25°	893.4	898.7	903.9	911.7	916.5	920.1	923.8	924.3	926.9	926.4	925.9
27.5°	857.9	864.7	873.6	879.8	886.1	891.9	896.1	897.1	899.7	898.7	899.2
30°	809.2	816.5	824.9	834.8	843.7	849.5	854.7	858.4	861.0	859.4	858.9
32.5°	740.2	747.5	756.4	766.3	776.8	785.2	791.4	796.1	799.3	798.2	795.6
35°	661.2	663.3	669.0	676.9	685.8	694.7	700.4	705.6	709.3	710.4	710.4
37.5°	580.1	573.3	569.1	569.1	574.3	578.0	583.2	586.4	592.1	594.2	595.8
40°	501.6	485.9	471.3	460.3	453.0	452.5	452.5	454.0	459.3	466.1	472.4
42.5°	431.5	406.4	383.9	363.5	348.9	340.5	336.9	337.4	341.6	347.9	358.3
45°	375.6	344.2	315.9	291.4	271.5	258.4	252.1	251.6	254.7	262.1	273.6
47.5°	332.2	298.7	266.8	238.5	217.1	203.0	195.6	193.5	195.6	202.4	216.0
50°	296.1	261.6	228.6	199.3	176.3	161.6	154.8	152.2	154.8	160.6	174.2
52.5°	262.6	227.0	196.2	167.9	143.3	130.8	123.4	121.9	123.4	130.2	141.2
55°	223.9	193.5	163.2	135.0	113.5	101.0	95.2	93.6	95.2	101.5	113.0
57.5°	185.7	159.5	132.9	107.2	88.9	77.9	72.7	70.6	74.3	78.5	92.1
60°	150.1	129.2	106.7	84.2	69.1	59.1	54.9	54.4	55.4	60.7	70.1
62.5°	117.7	100.4	82.6	64.3	51.8	47.6	42.4	41.9	42.9	46.0	53.4
65°	84.7	73.8	60.2	47.1	37.1	31.4	29.3	29.8	30.9	33.0	39.8
67.5°	59.1	51.3	41.9	33.0	25.6	23.0	20.9	20.4	20.9	24.6	28.2
70°	39.8	35.0	28.2	25.1	17.8	14.1	14.6	13.1	15.2	15.2	18.3
72.5°	26.1	23.0	18.8	14.6	12.6	9.9	9.9	9.4	10.5	11.0	13.6
75°	13.6	10.5	10.5	7.3	5.2	2.6	4.7	4.2	3.7	4.2	5.2
77.5°	9.4	7.8	7.3	5.8	5.2	4.2	4.2	4.2	4.2	4.7	5.2
80°	5.8	5.8	4.2	3.7	3.1	2.6	3.1	3.1	3.1	3.1	3.7
82.5°	3.7	3.1	3.1	2.6	2.6	2.1	2.1	2.1	2.1	2.1	3.1
85°	3.1	2.1	2.1	1.6	2.1	3.7	1.6	2.1	2.1	2.1	1.6
87.5°	1.0	1.6	1.6	1.6	1.0	0.5	1.0	1.6	1.6	2.6	2.1
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	976.1	976.6	976.6	976.1	976.1	975.0	977.1	975.6	976.1	978.2	976.6
5°	977.1	977.6	977.6	977.1	977.1	977.1	977.6	977.6	977.1	976.6	977.6
7.5°	979.2	978.7	978.7	977.6	977.6	976.6	977.6	976.1	977.1	976.1	977.6
10°	976.6	977.1	976.6	976.1	976.1	975.6	975.6	974.0	974.5	972.9	974.0
12.5°	975.0	974.5	974.5	973.5	972.4	971.4	970.9	969.3	969.3	965.6	967.2
15°	970.9	971.4	969.8	967.7	966.7	964.1	963.0	960.9	958.8	956.2	956.7
17.5°	967.2	965.6	963.5	961.4	957.2	955.2	953.1	949.9	948.9	945.7	944.7
20°	956.2	955.2	952.5	948.9	946.3	941.6	939.5	936.3	933.7	930.6	929.0
22.5°	942.1	941.0	937.9	934.2	930.0	928.0	925.9	920.1	917.5	914.4	913.8
25°	924.3	922.7	919.6	915.4	913.3	907.6	905.5	901.3	900.2	897.1	896.6
27.5°	897.1	895.0	891.3	886.1	882.4	878.8	876.7	873.6	872.5	869.4	868.9
30°	856.3	853.7	846.4	844.3	838.0	834.3	834.3	830.1	830.7	828.6	828.6
32.5°	792.0	787.8	782.0	777.8	773.6	771.6	771.6	770.0	771.0	771.0	772.1
35°	706.7	700.9	697.8	695.2	695.2	697.3	703.6	705.1	708.3	710.9	713.0
37.5°	597.4	596.8	600.5	603.6	611.5	620.4	631.4	640.8	649.7	656.0	662.2
40°	479.1	492.2	502.7	517.3	529.4	546.6	566.5	582.7	597.9	608.9	620.4
42.5°	374.0	390.7	412.7	434.2	455.6	479.1	505.3	527.8	547.7	562.8	574.9
45°	291.4	314.4	341.1	368.3	396.0	425.3	452.5	475.5	496.4	512.1	524.1
47.5°	234.9	260.0	290.3	320.1	351.5	382.4	412.7	432.6	449.9	462.4	473.4
50°	194.1	220.7	252.7	286.6	318.0	348.9	375.1	394.4	408.5	419.5	426.3
52.5°	162.2	190.4	224.4	258.4	289.8	318.0	341.6	356.2	367.7	375.6	381.8
55°	133.9	161.1	193.0	224.9	255.8	282.5	301.8	312.8	321.7	326.4	330.1
57.5°	109.3	134.4	163.7	193.0	219.7	241.7	256.8	267.8	272.0	275.7	275.1
60°	85.8	109.3	136.0	161.1	184.1	201.9	212.9	219.2	222.3	223.9	222.8
62.5°	67.5	88.9	109.3	131.3	148.0	163.2	173.7	173.7	175.2	175.8	177.3
65°	50.2	66.4	84.2	100.4	114.0	124.0	129.7	131.3	133.4	132.9	131.8
67.5°	37.1	49.2	62.2	74.3	83.7	90.0	94.2	97.8	97.3	96.2	95.7
70°	25.6	33.5	45.0	52.3	59.1	65.4	66.4	67.0	67.5	68.0	67.0
72.5°	17.8	23.5	29.8	36.1	40.3	42.9	45.5	46.0	46.0	46.0	45.5
75°	8.9	12.0	17.8	20.4	24.1	25.1	27.2	27.2	28.8	26.7	26.1
77.5°	7.8	9.4	12.6	14.6	16.2	17.8	18.3	19.9	19.4	18.3	18.8
80°	4.7	5.8	7.8	8.9	11.0	11.5	12.0	12.6	12.0	12.6	12.6
82.5°	3.7	4.2	5.2	5.2	6.8	6.8	7.3	7.3	7.8	7.8	7.8
85°	2.1	3.7	3.1	6.3	4.2	4.2	5.2	6.3	5.2	5.2	6.3
87.5°	2.1	2.1	1.6	2.1	2.1	2.1	2.6	3.1	3.1	3.7	3.1
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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CATALOG NUMBER: LSR8B20D010 EC8B20827 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	974.5	974.5	974.5	974.5
2.5°	976.1	977.1	975.6	975.0
5°	977.6	977.6	976.6	976.6
7.5°	977.6	977.6	976.1	975.0
10°	973.5	973.5	971.9	970.9
12.5°	965.6	965.6	965.1	963.5
15°	955.7	955.7	953.6	952.0
17.5°	942.1	943.1	940.5	940.5
20°	927.4	926.9	924.8	923.8
22.5°	912.3	911.2	910.7	907.6
25°	896.1	895.0	893.4	891.9
27.5°	868.3	867.8	866.2	864.1
30°	826.0	825.4	823.3	823.3
32.5°	771.0	770.5	768.4	768.9
35°	714.0	716.1	715.1	713.0
37.5°	666.4	668.0	669.0	668.0
40°	626.7	631.4	631.9	632.9
42.5°	584.3	590.6	592.7	593.7
45°	533.5	539.3	544.0	543.0
47.5°	481.8	485.9	490.1	487.0
50°	432.1	434.7	436.3	436.3
52.5°	385.0	385.0	384.5	385.0
55°	331.1	331.1	329.0	330.1
57.5°	274.6	275.7	274.1	271.5
60°	222.3	219.7	218.6	217.1
62.5°	173.1	173.1	169.5	174.2
65°	129.7	128.2	126.6	126.1
67.5°	94.2	93.6	92.1	91.5
70°	66.4	64.3	63.8	62.8
72.5°	44.5	44.5	43.4	43.4
75°	27.2	24.6	24.1	24.6
77.5°	18.8	18.3	18.3	17.8
80°	12.6	12.0	13.1	11.5
82.5°	7.8	8.4	7.8	8.4
85°	5.2	6.3	5.8	5.8
87.5°	3.1	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)