

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P273713

Luminaire Tested: **8RCG-4-34D-L830-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P273713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-20)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8RCG-4-34D-L830-A
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC FLUSH LENS
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

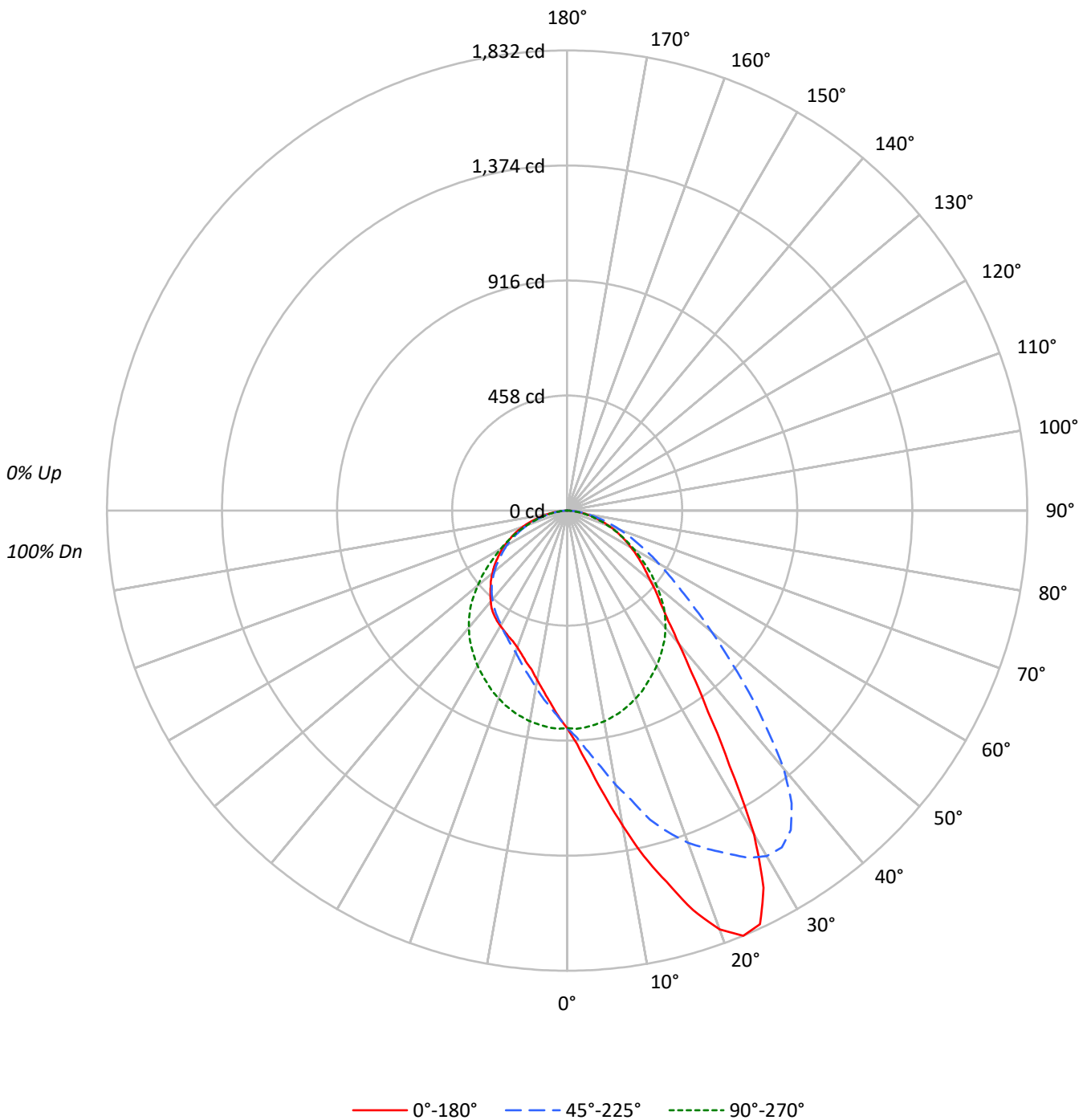
Lumens per Lamp: N/A
Luminaire Lumens: 2612.3 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.5
Luminous Opening: Rectangular (W 7.88' x L: 0.23' x H: 0')
CIE Type: Direct

Input Watts (W): 22.8
Input Voltage (V): 120
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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	53
5	78	66	57	51	76	64	56	50	62	55	50	60	54	49	59	53	49	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	41
7	67	54	45	39	65	53	45	39	52	44	39	50	44	39	49	43	38	36
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	35	33
9	58	45	37	32	57	45	37	32	43	36	32	42	36	31	41	36	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5163	5163	5163
5°	6156	5185	4595
10°	7705	5158	4150
15°	9451	5116	3863
20°	11259	5051	3679
25°	11955	4973	3637
30°	10247	4916	3656
35°	7127	4833	3694
40°	5368	4737	3683
45°	4457	4595	3635
50°	3992	4304	3604
55°	3733	3989	3558
60°	3502	3662	3521
65°	3291	3339	3410
70°	3087	2968	3247
75°	2765	2599	2977
80°	2418	2130	2562
85°	1889	1547	1725



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.1	3.3
10°-20°	273.4	10.5
20°-30°	460.0	17.6
30°-40°	519.9	19.9
40°-50°	465.7	17.8
50°-60°	375.9	14.4
60°-70°	261.9	10.0
70°-80°	137.5	5.3
80°-90°	32.9	1.3
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°	818.5	31.3
0°-40°	1338.4	51.2
0°-60°	2180.0	83.5
0°-90°	2612.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2612.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	866	866	866	866	866	
5°	1028	964	866	784	767	106
15°	1531	1274	829	653	626	442
25°	1817	1505	756	561	553	803
35°	979	1552	664	496	507	632
45°	528	1023	545	424	431	417
55°	359	556	384	328	342	322
65°	233	312	237	223	242	232
75°	120	148	113	112	129	128
85°	28	32	23	22	25	34
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°	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6
2.5°	931.8	931.0	928.8	930.4	927.2	922.6	922.2	918.0	905.8	905.0	901.6
5°	1028.2	1024.8	1024.4	1024.0	1018.2	1010.2	995.0	993.8	973.6	963.6	951.4
7.5°	1144.8	1143.6	1140.2	1136.4	1116.6	1107.0	1092.8	1074.4	1050.8	1028.2	1014.0
10°	1272.2	1286.0	1268.8	1257.2	1246.2	1225.8	1201.8	1172.0	1142.2	1107.4	1081.0
12.5°	1409.0	1414.0	1414.0	1403.0	1384.6	1350.6	1303.8	1270.2	1243.4	1179.6	1157.0
15°	1530.6	1556.2	1539.8	1502.0	1502.8	1473.2	1417.8	1357.0	1324.6	1274.0	1204.8
17.5°	1668.2	1672.8	1667.6	1632.4	1615.2	1572.0	1522.2	1465.6	1404.8	1343.2	1271.4
20°	1773.8	1771.2	1756.6	1740.2	1704.2	1672.2	1616.6	1551.6	1467.6	1407.2	1327.2
22.5°	1832.4	1827.8	1822.8	1809.8	1781.4	1746.6	1697.8	1625.4	1546.4	1457.6	1362.0
25°	1816.6	1822.0	1822.8	1819.0	1808.6	1788.0	1748.6	1692.0	1612.4	1505.4	1409.0
27.5°	1693.2	1707.0	1724.8	1736.4	1755.4	1768.0	1755.4	1719.6	1654.2	1558.6	1440.0
30°	1487.8	1471.0	1512.6	1565.0	1600.6	1663.4	1698.8	1700.8	1667.6	1588.4	1473.6
32.5°	1202.6	1230.0	1242.4	1310.0	1398.4	1471.0	1549.8	1619.8	1636.2	1590.2	1493.2
35°	978.8	1001.8	1035.4	1068.8	1152.8	1224.8	1348.2	1455.6	1541.0	1552.4	1490.8
37.5°	813.6	827.0	847.4	883.2	940.6	1029.8	1127.6	1267.2	1385.0	1468.0	1459.6
40°	689.4	692.8	716.6	742.2	786.6	857.2	943.0	1063.0	1211.4	1340.2	1393.8
42.5°	596.2	604.6	611.4	635.8	668.8	717.4	795.8	889.8	1022.8	1175.8	1293.6
45°	528.4	536.8	543.0	559.4	584.6	620.2	676.0	766.6	870.2	1023.2	1164.4
47.5°	481.4	480.6	486.0	499.0	517.0	545.6	586.6	647.0	746.4	874.4	1022.4
50°	430.2	437.0	438.6	448.2	461.6	481.4	514.2	563.6	641.6	750.6	884.0
52.5°	394.2	395.0	400.4	406.8	418.0	432.4	459.6	495.6	552.6	641.6	761.6
55°	359.0	359.0	363.6	369.0	375.8	389.6	408.4	437.0	483.4	555.6	657.0
57.5°	326.2	328.0	332.2	333.4	339.2	348.8	365.2	387.8	423.6	481.8	565.6
60°	293.6	297.4	296.8	300.2	305.2	312.4	325.8	343.4	374.4	419.0	486.8
62.5°	265.0	263.8	263.8	268.0	273.0	279.6	287.2	302.0	327.0	365.2	420.6
65°	233.2	232.4	235.2	237.8	239.4	244.4	251.2	264.6	282.2	311.6	356.4
67.5°	205.4	203.0	205.0	205.8	208.8	213.0	219.8	228.2	242.4	267.2	303.2
70°	177.0	174.8	174.4	175.2	177.8	180.8	185.4	193.4	206.4	225.2	250.0
72.5°	147.6	146.4	146.4	148.4	149.2	151.0	153.8	161.0	170.6	183.6	206.4
75°	120.0	120.0	120.0	120.4	121.6	123.2	125.8	129.6	137.6	147.6	163.2
77.5°	94.8	95.2	94.4	94.0	96.0	96.8	97.2	101.4	106.0	113.6	125.8
80°	70.4	68.4	69.2	70.4	71.2	71.8	73.0	73.8	77.6	81.4	89.4
82.5°	47.8	46.2	46.2	48.2	48.2	48.6	50.0	51.2	52.0	55.4	58.8
85°	27.6	27.6	28.0	28.0	28.6	28.0	29.4	29.8	29.8	31.8	34.4
87.5°	12.6	11.8	12.2	12.6	12.2	12.6	13.0	13.4	13.8	14.2	14.6
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°	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6
2.5°	899.0	895.6	892.4	886.4	881.4	874.4	872.2	869.6	862.2	855.4	850.4
5°	946.8	936.8	922.2	908.6	897.8	883.2	874.8	866.0	853.4	842.0	832.8
7.5°	992.6	975.0	954.4	932.2	910.8	890.2	873.8	859.2	842.8	827.0	814.8
10°	1049.2	1020.6	988.8	954.4	925.0	896.6	872.6	851.6	829.0	809.4	793.0
12.5°	1113.8	1068.0	1021.0	977.4	941.4	899.0	868.8	840.8	814.4	789.6	770.8
15°	1162.0	1108.2	1056.2	998.8	946.0	896.6	862.2	828.6	798.8	774.6	751.0
17.5°	1209.8	1151.0	1084.8	1015.6	953.6	896.6	849.6	813.6	777.0	747.6	725.0
20°	1249.2	1180.0	1102.4	1029.8	959.4	894.0	841.2	795.8	755.6	724.2	697.8
22.5°	1283.2	1199.2	1118.4	1039.6	959.0	887.4	825.6	778.6	734.2	703.6	675.2
25°	1304.6	1207.6	1127.2	1036.2	948.6	875.6	808.4	755.6	712.0	676.0	647.0
27.5°	1324.6	1206.4	1115.4	1017.2	936.0	863.4	791.2	734.6	689.0	650.0	620.2
30°	1344.8	1208.6	1094.8	998.0	915.8	840.4	770.8	713.8	665.0	625.2	597.6
32.5°	1357.4	1207.2	1076.0	971.2	884.0	819.4	748.6	689.0	638.6	599.6	573.2
35°	1360.8	1200.2	1053.8	932.2	849.2	784.2	725.0	663.8	611.4	575.0	544.8
37.5°	1353.6	1187.2	1029.4	897.0	807.2	742.6	691.0	638.6	588.4	547.6	521.2
40°	1330.6	1174.6	1000.2	859.2	763.6	702.0	659.6	608.4	559.0	520.8	496.4
42.5°	1286.6	1149.0	967.8	817.2	718.4	656.6	618.6	577.8	531.8	496.4	472.2
45°	1209.4	1109.6	935.6	775.4	673.8	610.2	575.8	544.8	502.4	467.6	446.6
47.5°	1110.8	1056.2	889.0	731.4	627.4	565.6	529.6	504.0	471.0	442.8	422.2
50°	1007.2	987.6	841.6	686.0	580.8	520.8	486.4	463.8	441.6	413.4	395.0
52.5°	887.8	907.8	786.2	639.0	533.4	474.6	442.8	426.0	406.4	384.6	369.0
55°	777.0	821.0	720.8	585.4	486.4	430.2	399.6	383.6	372.0	354.8	341.0
57.5°	669.6	725.8	652.8	531.2	440.2	391.2	361.0	343.0	335.4	325.8	314.4
60°	576.2	631.6	579.0	476.8	393.8	347.6	321.6	307.0	299.4	293.2	283.8
62.5°	492.8	549.0	507.0	421.4	348.0	306.2	284.4	270.0	264.6	262.0	254.6
65°	417.6	465.8	436.6	363.6	304.8	267.2	246.6	236.6	231.0	229.8	224.8
67.5°	352.6	390.0	367.4	312.4	264.6	230.2	212.2	203.4	198.8	198.4	194.2
70°	289.0	323.4	307.0	258.4	218.4	192.8	177.8	170.2	167.8	167.4	165.2
72.5°	239.4	260.8	248.6	210.0	181.6	159.0	148.8	140.8	138.0	138.8	137.6
75°	184.6	202.6	195.0	166.8	142.2	127.0	117.8	112.8	110.2	111.6	109.8
77.5°	140.8	153.4	146.0	124.6	108.6	97.2	90.2	86.8	84.2	84.2	83.4
80°	100.2	107.0	103.2	91.4	78.8	69.6	64.2	62.0	60.8	60.4	60.0
82.5°	64.2	69.6	65.0	57.8	50.4	45.8	43.2	40.2	39.4	39.8	39.4
85°	36.0	38.2	36.4	31.4	28.0	25.6	24.0	22.6	21.8	22.2	21.4
87.5°	15.6	16.0	14.6	13.0	12.2	11.0	11.0	10.0	9.2	9.2	8.8
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°	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6	865.6
2.5°	847.4	844.6	840.4	834.0	829.0	821.0	821.0	822.4	822.4	821.8	821.0
5°	825.2	819.0	811.4	802.6	793.4	784.2	782.4	779.2	776.6	775.0	772.8
7.5°	802.6	792.2	781.6	769.4	759.0	750.2	743.8	738.4	735.0	731.4	728.4
10°	779.6	765.6	752.8	739.8	725.4	714.2	707.0	702.0	698.2	694.8	693.2
12.5°	752.2	736.0	721.2	709.0	693.2	681.4	674.8	673.0	668.4	660.4	656.2
15°	725.8	711.2	694.0	675.2	667.6	653.4	645.4	641.6	639.0	633.6	632.0
17.5°	704.0	684.4	664.6	650.8	637.0	625.6	621.0	616.0	612.6	607.6	606.4
20°	676.8	659.6	642.0	627.0	612.2	599.6	595.8	592.6	589.2	587.0	585.4
22.5°	649.2	632.0	618.0	604.2	588.4	581.2	577.0	573.2	571.2	569.8	568.2
25°	623.6	608.4	592.0	579.6	567.0	561.4	559.0	556.8	555.2	553.0	552.6
27.5°	601.0	584.2	570.2	558.2	549.0	544.2	541.4	540.0	540.0	541.0	541.4
30°	575.0	559.8	549.0	538.8	530.4	526.2	525.8	525.8	527.6	528.0	528.8
32.5°	551.0	539.2	528.4	518.8	512.8	510.4	512.4	512.4	513.6	515.0	516.6
35°	528.0	517.0	508.6	500.2	494.8	496.0	497.0	497.8	499.8	502.4	504.0
37.5°	506.2	496.0	487.2	480.6	477.2	479.8	481.8	483.4	486.0	488.2	489.8
40°	482.2	475.2	466.8	460.8	461.6	463.0	464.6	466.8	468.8	470.0	471.8
42.5°	460.0	452.4	446.6	442.0	443.2	445.0	445.8	446.6	449.2	451.6	452.4
45°	437.4	431.4	425.6	422.6	423.6	424.4	425.2	426.4	428.6	430.2	430.6
47.5°	411.8	407.6	403.8	400.4	402.2	401.8	403.0	405.4	406.4	407.2	409.6
50°	387.4	383.6	379.0	378.2	378.2	378.2	378.6	382.0	382.0	383.6	385.4
52.5°	360.6	358.6	356.0	354.4	353.4	353.4	355.6	356.8	357.6	360.2	361.8
55°	334.2	331.6	329.2	328.0	327.0	328.0	331.2	332.2	334.2	335.4	336.8
57.5°	306.6	304.8	302.8	302.0	302.0	302.4	304.8	307.0	307.4	311.6	313.2
60°	279.2	276.4	274.6	274.6	273.8	277.6	276.8	281.0	281.8	284.4	287.2
62.5°	251.2	247.0	246.6	246.6	248.2	248.6	250.4	251.6	254.2	257.4	259.6
65°	220.6	218.4	221.4	221.0	220.2	222.6	222.6	224.8	227.2	230.2	234.8
67.5°	192.0	190.4	191.2	190.8	192.0	193.8	195.0	196.6	199.6	203.0	205.8
70°	163.2	164.4	162.2	164.0	165.2	165.6	166.4	169.0	172.4	174.4	177.8
72.5°	135.0	134.6	135.4	135.8	137.2	138.0	138.8	141.8	145.6	147.2	149.8
75°	108.2	107.8	109.0	109.0	111.2	112.0	112.8	114.0	117.4	120.0	122.0
77.5°	83.8	84.2	83.8	85.6	84.8	85.2	87.6	88.8	89.4	94.8	95.6
80°	59.6	60.4	60.8	61.2	61.6	60.8	63.8	65.0	65.0	68.0	70.0
82.5°	38.6	39.0	40.2	40.6	40.6	42.0	41.6	42.4	43.6	44.4	47.4
85°	21.4	22.6	23.0	22.6	23.0	22.2	23.4	24.0	24.4	24.4	24.4
87.5°	8.4	8.8	8.4	8.8	8.4	8.8	8.8	8.0	8.0	9.2	7.6
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: P273713

CATALOG NUMBER: 8RCG-4-34D-L830-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	865.6	865.6	865.6	865.6
2.5°	818.2	817.6	820.6	818.6
5°	770.4	771.6	767.4	767.4
7.5°	727.2	725.4	725.8	723.0
10°	688.2	685.6	684.8	685.2
12.5°	655.8	655.8	649.2	649.2
15°	632.0	624.0	623.2	625.6
17.5°	605.6	601.0	601.4	600.4
20°	585.4	582.8	582.4	579.6
22.5°	567.0	566.6	567.0	563.6
25°	552.2	554.4	552.6	552.6
27.5°	542.2	542.2	541.0	541.0
30°	530.4	530.0	530.8	530.8
32.5°	518.8	519.6	519.6	520.0
35°	506.6	507.0	508.2	507.4
37.5°	490.6	492.8	492.2	493.2
40°	472.2	473.4	473.0	473.0
42.5°	453.2	454.2	452.8	452.0
45°	432.4	431.4	432.8	431.0
47.5°	409.2	409.6	410.2	411.8
50°	386.2	388.8	388.8	388.4
52.5°	363.6	364.4	366.4	366.4
55°	340.0	341.0	341.8	342.2
57.5°	316.2	315.8	317.4	317.8
60°	290.6	290.6	294.0	295.2
62.5°	263.4	265.0	268.4	265.8
65°	237.0	240.2	239.8	241.6
67.5°	209.2	211.4	214.6	214.6
70°	181.2	183.2	185.0	186.2
72.5°	153.8	154.8	159.4	156.8
75°	125.0	127.8	130.4	129.2
77.5°	97.2	101.0	101.8	100.6
80°	73.0	72.6	75.0	74.6
82.5°	48.6	48.2	49.0	49.4
85°	26.0	27.2	25.6	25.2
87.5°	7.6	7.6	7.2	6.8
90°	0.0	0.0	0.0	0.0

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