

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: P273719

Luminaire Tested: **8RCG-4-34D-L840-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P273719
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-L840-A
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC FLUSH LENS
Light Source: (168) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

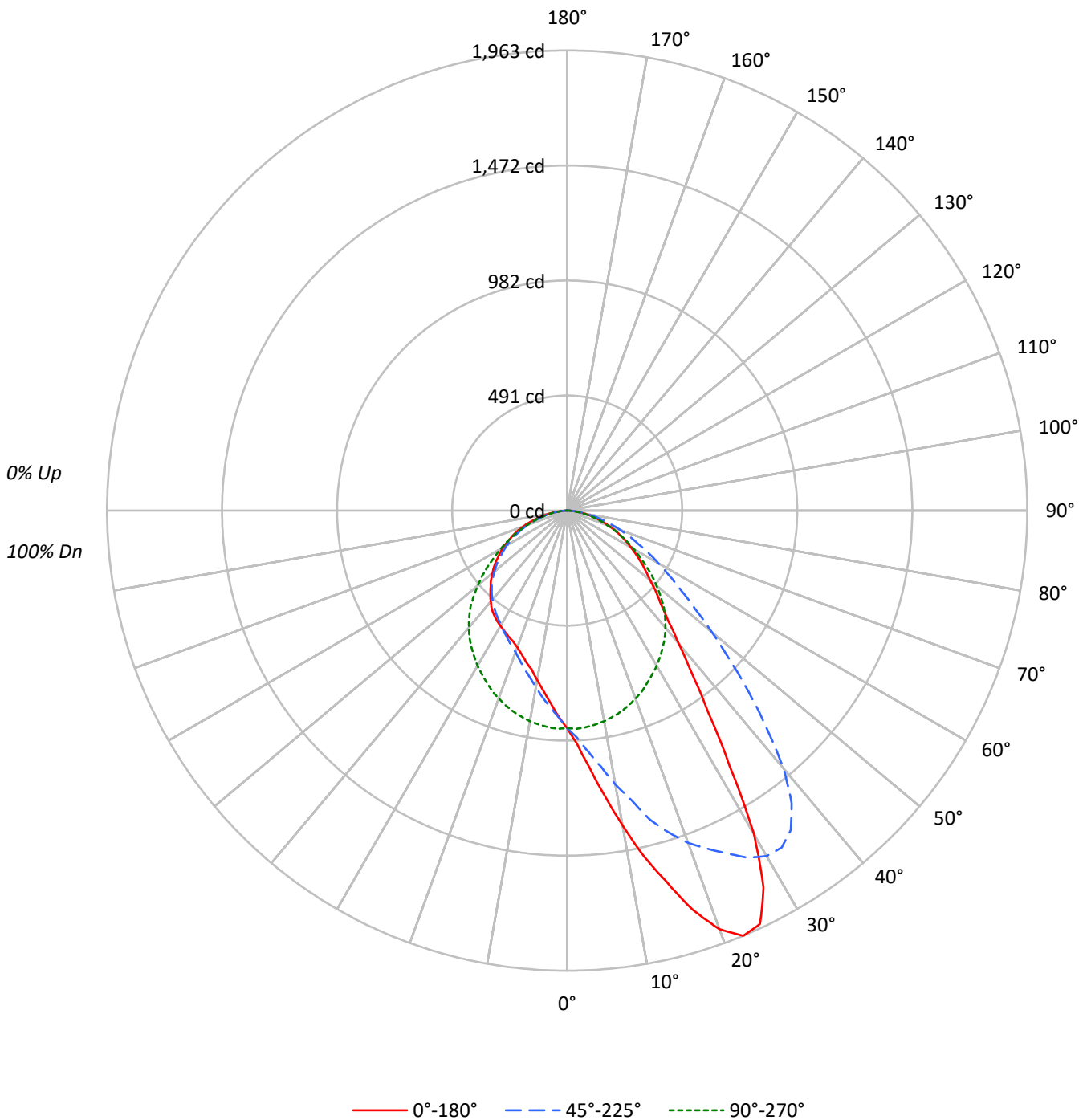
Lumens per Lamp: N/A
Luminaire Lumens: 2798.9 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.5
Luminous Opening: Rectangular (W 7.88' x L: 0.23' x H: 0')
CIE Type: Direct

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	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	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°	5531	5531	5531
5°	6595	5555	4923
10°	8256	5526	4447
15°	10125	5482	4140
20°	12062	5413	3942
25°	12808	5328	3897
30°	10978	5266	3917
35°	7635	5178	3958
40°	5751	5076	3946
45°	4774	4923	3895
50°	4278	4612	3860
55°	3999	4274	3812
60°	3750	3922	3772
65°	3525	3576	3652
70°	3306	3181	3477
75°	2959	2784	3189
80°	2590	2281	2748
85°	2026	1656	1848



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.2	3.3
10°-20°	292.9	10.5
20°-30°	492.9	17.6
30°-40°	557.0	19.9
40°-50°	498.9	17.8
50°-60°	402.7	14.4
60°-70°	280.6	10.0
70°-80°	147.3	5.3
80°-90°	35.3	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°	877.0	31.3
0°-40°	1434.0	51.2
0°-60°	2335.7	83.5
0°-90°	2798.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2798.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	927	927	927	927	927	
5°	1102	1032	928	840	822	113
15°	1640	1365	888	700	670	473
25°	1946	1613	810	602	592	860
35°	1049	1663	711	532	544	677
45°	566	1096	584	455	462	446
55°	385	595	411	351	367	345
65°	250	334	253	239	259	249
75°	128	158	121	120	138	137
85°	30	34	24	24	27	36
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°	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4
2.5°	998.4	997.4	995.2	997.0	993.4	988.4	988.0	983.4	970.4	969.6	966.0
5°	1101.6	1098.0	1097.6	1097.2	1090.8	1082.4	1066.2	1064.8	1043.2	1032.4	1019.4
7.5°	1226.6	1225.2	1221.6	1217.6	1196.4	1186.2	1170.8	1151.0	1126.0	1101.6	1086.4
10°	1363.2	1378.0	1359.6	1347.0	1335.2	1313.2	1287.6	1255.8	1223.8	1186.6	1158.2
12.5°	1509.6	1515.0	1515.0	1503.4	1483.6	1447.2	1396.8	1360.8	1332.2	1263.8	1239.6
15°	1639.8	1667.2	1649.8	1609.4	1610.2	1578.4	1519.0	1453.8	1419.2	1365.0	1290.8
17.5°	1787.2	1792.2	1786.8	1749.0	1730.6	1684.4	1630.8	1570.2	1505.0	1439.0	1362.2
20°	1900.4	1897.8	1882.0	1864.6	1825.8	1791.8	1732.0	1662.4	1572.4	1507.8	1422.0
22.5°	1963.4	1958.4	1953.0	1939.2	1908.6	1871.2	1819.2	1741.4	1657.0	1561.8	1459.2
25°	1946.2	1952.2	1953.0	1949.0	1937.8	1915.8	1873.6	1812.8	1727.4	1613.0	1509.6
27.5°	1814.2	1829.0	1848.0	1860.4	1880.6	1894.2	1880.6	1842.6	1772.4	1670.0	1542.8
30°	1594.0	1576.0	1620.6	1676.8	1715.0	1782.4	1820.0	1822.2	1786.8	1701.8	1578.8
32.5°	1288.6	1317.8	1331.2	1403.6	1498.4	1576.0	1660.6	1735.6	1753.2	1703.6	1599.8
35°	1048.6	1073.4	1109.2	1145.2	1235.0	1312.4	1444.4	1559.4	1651.2	1663.2	1597.2
37.5°	871.6	886.0	908.0	946.2	1007.8	1103.4	1208.2	1357.8	1484.0	1573.0	1564.0
40°	738.6	742.2	767.8	795.2	842.8	918.4	1010.4	1139.0	1298.0	1436.0	1493.4
42.5°	638.8	647.8	655.0	681.2	716.6	768.8	852.8	953.4	1095.8	1259.8	1386.0
45°	566.0	575.0	581.8	599.4	626.4	664.4	724.2	821.2	932.2	1096.2	1247.6
47.5°	515.8	514.8	520.8	534.6	554.0	584.6	628.6	693.2	799.8	936.8	1095.4
50°	461.0	468.2	470.0	480.2	494.6	515.8	550.8	603.8	687.4	804.2	947.0
52.5°	422.4	423.2	429.0	435.8	448.0	463.2	492.4	531.0	592.2	687.4	815.8
55°	384.6	384.6	389.6	395.4	402.6	417.4	437.6	468.2	518.0	595.4	704.0
57.5°	349.6	351.4	355.8	357.2	363.4	373.8	391.4	415.6	453.8	516.2	606.0
60°	314.4	318.6	318.0	321.6	327.0	334.8	349.0	368.0	401.2	448.8	521.6
62.5°	284.0	282.6	282.6	287.0	292.4	299.6	307.8	323.4	350.4	391.4	450.6
65°	249.8	249.0	252.0	254.8	256.6	262.0	269.2	283.4	302.4	333.8	381.8
67.5°	220.2	217.4	219.6	220.6	223.8	228.2	235.4	244.4	259.6	286.2	324.8
70°	189.6	187.4	187.0	187.8	190.4	193.6	198.6	207.2	221.0	241.2	267.8
72.5°	158.2	156.8	156.8	159.0	160.0	161.8	164.8	172.6	182.8	196.8	221.0
75°	128.4	128.4	128.4	129.0	130.2	132.0	134.8	138.8	147.4	158.2	174.8
77.5°	101.6	102.0	101.0	100.6	102.8	103.8	104.2	108.8	113.6	121.8	134.8
80°	75.4	73.2	74.2	75.4	76.4	76.8	78.2	79.0	83.2	87.2	95.6
82.5°	51.2	49.4	49.4	51.6	51.6	52.2	53.4	54.8	55.8	59.4	62.8
85°	29.6	29.6	30.2	30.2	30.6	30.2	31.4	31.8	31.8	34.2	36.8
87.5°	13.4	12.6	13.0	13.4	13.0	13.4	14.0	14.4	14.8	15.2	15.8
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°	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4
2.5°	963.2	959.6	956.0	949.8	944.4	936.8	934.6	931.8	923.8	916.6	911.2
5°	1014.4	1003.6	988.0	973.6	962.0	946.2	937.2	927.8	914.2	902.2	892.2
7.5°	1063.4	1044.6	1022.6	998.8	975.8	953.8	936.4	920.6	903.0	886.0	873.0
10°	1124.2	1093.6	1059.4	1022.6	991.2	960.6	935.0	912.4	888.2	867.2	849.6
12.5°	1193.2	1144.4	1094.0	1047.2	1008.6	963.2	931.0	900.8	872.6	846.0	825.8
15°	1245.0	1187.4	1131.8	1070.2	1013.6	960.6	923.8	887.8	855.8	829.8	804.6
17.5°	1296.2	1233.2	1162.2	1088.2	1021.6	960.6	910.2	871.6	832.6	801.0	776.8
20°	1338.4	1264.2	1181.2	1103.4	1028.0	957.8	901.2	852.8	809.6	776.0	747.6
22.5°	1374.8	1285.0	1198.2	1113.8	1027.6	950.6	884.6	834.4	786.6	753.8	723.4
25°	1397.8	1294.0	1207.6	1110.2	1016.2	938.2	866.2	809.6	762.8	724.2	693.2
27.5°	1419.2	1292.6	1195.0	1090.0	1002.8	925.0	847.8	787.2	738.2	696.4	664.4
30°	1440.8	1294.8	1173.0	1069.2	981.2	900.4	825.8	764.6	712.6	669.8	640.2
32.5°	1454.4	1293.4	1152.8	1040.6	947.0	877.8	802.0	738.2	684.2	642.4	614.2
35°	1458.0	1285.8	1129.0	998.8	909.8	840.2	776.8	711.2	655.0	616.0	583.6
37.5°	1450.2	1272.0	1103.0	961.0	864.8	795.6	740.4	684.2	630.4	586.8	558.4
40°	1425.6	1258.4	1071.6	920.6	818.2	752.2	706.8	652.0	598.8	558.0	532.0
42.5°	1378.4	1231.0	1037.0	875.6	769.6	703.6	662.6	619.2	569.6	532.0	505.8
45°	1295.8	1188.8	1002.4	830.8	722.0	653.8	616.8	583.6	538.2	501.0	478.4
47.5°	1190.2	1131.8	952.4	783.6	672.2	606.0	567.4	540.0	504.6	474.4	452.4
50°	1079.2	1058.0	901.8	735.0	622.2	558.0	521.2	497.0	473.0	443.0	423.2
52.5°	951.2	972.6	842.4	684.8	571.4	508.6	474.4	456.4	435.4	412.0	395.4
55°	832.6	879.6	772.4	627.2	521.2	461.0	428.2	411.0	398.6	380.0	365.2
57.5°	717.6	777.8	699.6	569.2	471.8	419.2	386.8	367.6	359.4	349.0	337.0
60°	617.4	676.6	620.4	510.8	421.8	372.4	344.6	328.8	320.8	314.0	304.2
62.5°	528.0	588.2	543.2	451.6	373.0	328.0	304.6	289.4	283.4	280.8	272.8
65°	447.4	499.2	467.8	389.6	326.6	286.2	264.2	253.4	247.6	246.2	240.8
67.5°	377.8	417.8	393.6	334.8	283.4	246.6	227.4	218.0	213.0	212.6	208.0
70°	309.6	346.4	328.8	276.8	234.0	206.6	190.4	182.4	179.8	179.2	177.0
72.5°	256.6	279.4	266.4	225.0	194.6	170.2	159.4	151.0	147.8	148.8	147.4
75°	197.6	217.0	209.0	178.8	152.4	136.2	126.2	120.8	118.2	119.6	117.8
77.5°	151.0	164.4	156.4	133.4	116.4	104.2	96.6	93.0	90.4	90.4	89.4
80°	107.4	114.6	110.6	98.0	84.4	74.6	68.8	66.4	65.2	64.6	64.2
82.5°	68.8	74.6	69.6	62.0	54.0	49.0	46.2	43.2	42.2	42.6	42.2
85°	38.6	40.8	39.0	33.6	30.2	27.4	25.6	24.2	23.4	23.8	23.0
87.5°	16.6	17.0	15.8	14.0	13.0	11.6	11.6	10.8	9.8	9.8	9.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4	927.4
2.5°	908.0	904.8	900.4	893.6	888.2	879.6	879.6	881.0	881.0	880.6	879.6
5°	884.2	877.4	869.4	860.0	850.0	840.2	838.4	834.8	832.0	830.2	828.0
7.5°	860.0	848.6	837.4	824.4	813.2	803.8	797.0	791.2	787.6	783.6	780.4
10°	835.2	820.4	806.4	792.6	777.2	765.2	757.4	752.2	748.0	744.4	742.6
12.5°	806.0	788.4	772.8	759.8	742.6	730.0	722.8	721.0	716.2	707.6	703.2
15°	777.8	762.0	743.6	723.4	715.2	700.0	691.4	687.4	684.8	678.8	677.0
17.5°	754.4	733.2	712.2	697.2	682.4	670.4	665.4	660.0	656.4	651.0	649.6
20°	725.2	706.8	687.8	671.6	656.0	642.4	638.4	634.8	631.2	629.0	627.2
22.5°	695.4	677.0	662.2	647.4	630.4	622.8	618.2	614.2	612.0	610.6	608.8
25°	668.0	652.0	634.4	621.0	607.4	601.6	598.8	596.6	594.8	592.6	592.2
27.5°	643.8	625.8	611.0	598.0	588.2	583.2	580.0	578.6	578.6	579.6	580.0
30°	616.0	599.8	588.2	577.4	568.4	563.8	563.4	563.4	565.2	565.6	566.6
32.5°	590.4	577.8	566.0	555.8	549.4	546.8	549.0	549.0	550.4	551.8	553.6
35°	565.6	554.0	545.0	536.0	530.2	531.6	532.4	533.2	535.6	538.2	540.0
37.5°	542.2	531.6	522.0	514.8	511.2	514.0	516.2	518.0	520.8	523.0	524.8
40°	516.6	509.0	500.0	493.8	494.6	496.0	497.8	500.0	502.2	503.6	505.4
42.5°	492.8	484.8	478.4	473.6	474.8	476.6	477.6	478.4	481.2	483.8	484.8
45°	468.6	462.4	456.0	452.8	453.8	454.6	455.6	457.0	459.2	461.0	461.4
47.5°	441.2	436.8	432.6	429.0	430.8	430.4	431.8	434.4	435.4	436.2	439.0
50°	415.2	411.0	406.2	405.2	405.2	405.2	405.8	409.2	409.2	411.0	412.8
52.5°	386.4	384.2	381.4	379.6	378.8	378.8	381.0	382.4	383.2	386.0	387.8
55°	358.0	355.4	352.6	351.4	350.4	351.4	355.0	355.8	358.0	359.4	360.8
57.5°	328.4	326.6	324.4	323.4	323.4	324.0	326.6	328.8	329.4	333.8	335.6
60°	299.2	296.0	294.2	294.2	293.4	297.4	296.6	301.0	302.0	304.6	307.8
62.5°	269.2	264.6	264.2	264.2	266.0	266.4	268.2	269.6	272.2	275.8	278.2
65°	236.4	234.0	237.2	236.8	235.8	238.6	238.6	240.8	243.6	246.6	251.6
67.5°	205.8	204.0	204.8	204.4	205.8	207.6	209.0	210.8	213.8	217.4	220.6
70°	174.8	176.2	173.8	175.6	177.0	177.4	178.4	181.0	184.6	187.0	190.4
72.5°	144.6	144.2	145.2	145.6	147.0	147.8	148.8	151.8	156.0	157.6	160.4
75°	116.0	115.4	116.8	116.8	119.0	120.0	120.8	122.2	125.8	128.4	130.8
77.5°	89.8	90.4	89.8	91.6	90.8	91.2	94.0	95.2	95.6	101.6	102.4
80°	63.8	64.6	65.2	65.6	66.0	65.2	68.2	69.6	69.6	72.8	75.0
82.5°	41.4	41.8	43.2	43.6	43.6	45.0	44.4	45.4	46.8	47.6	50.8
85°	23.0	24.2	24.8	24.2	24.8	23.8	25.2	25.6	26.0	26.0	26.0
87.5°	9.0	9.4	9.0	9.4	9.0	9.4	9.4	8.6	8.6	9.8	8.0
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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CATALOG NUMBER: 8RCG-4-34D-L840-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	927.4	927.4	927.4	927.4
2.5°	876.6	876.2	879.2	877.0
5°	825.4	826.6	822.2	822.2
7.5°	779.0	777.2	777.8	774.6
10°	737.2	734.6	733.6	734.2
12.5°	702.6	702.6	695.4	695.4
15°	677.0	668.6	667.6	670.4
17.5°	648.8	643.8	644.2	643.4
20°	627.2	624.6	624.0	621.0
22.5°	607.4	607.0	607.4	603.8
25°	591.8	594.0	592.2	592.2
27.5°	581.0	581.0	579.6	579.6
30°	568.4	567.8	568.8	568.8
32.5°	555.8	556.6	556.6	557.2
35°	542.8	543.2	544.6	543.6
37.5°	525.6	528.0	527.4	528.4
40°	505.8	507.2	506.8	506.8
42.5°	485.6	486.6	485.2	484.4
45°	463.2	462.4	463.6	461.8
47.5°	438.6	439.0	439.4	441.2
50°	413.8	416.4	416.4	416.0
52.5°	389.6	390.4	392.6	392.6
55°	364.4	365.2	366.2	366.6
57.5°	338.8	338.4	340.2	340.6
60°	311.4	311.4	315.0	316.2
62.5°	282.2	284.0	287.6	284.8
65°	253.8	257.4	257.0	258.8
67.5°	224.2	226.4	230.0	230.0
70°	194.0	196.4	198.2	199.4
72.5°	164.8	165.8	170.8	168.0
75°	133.8	137.0	139.8	138.4
77.5°	104.2	108.2	109.2	107.8
80°	78.2	77.8	80.4	80.0
82.5°	52.2	51.6	52.6	53.0
85°	27.8	29.2	27.4	27.0
87.5°	8.0	8.0	7.6	7.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)