

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: P273731

Luminaire Tested: **8RCG-4-34D-L940-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P273731
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-L940-A
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC FLUSH LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

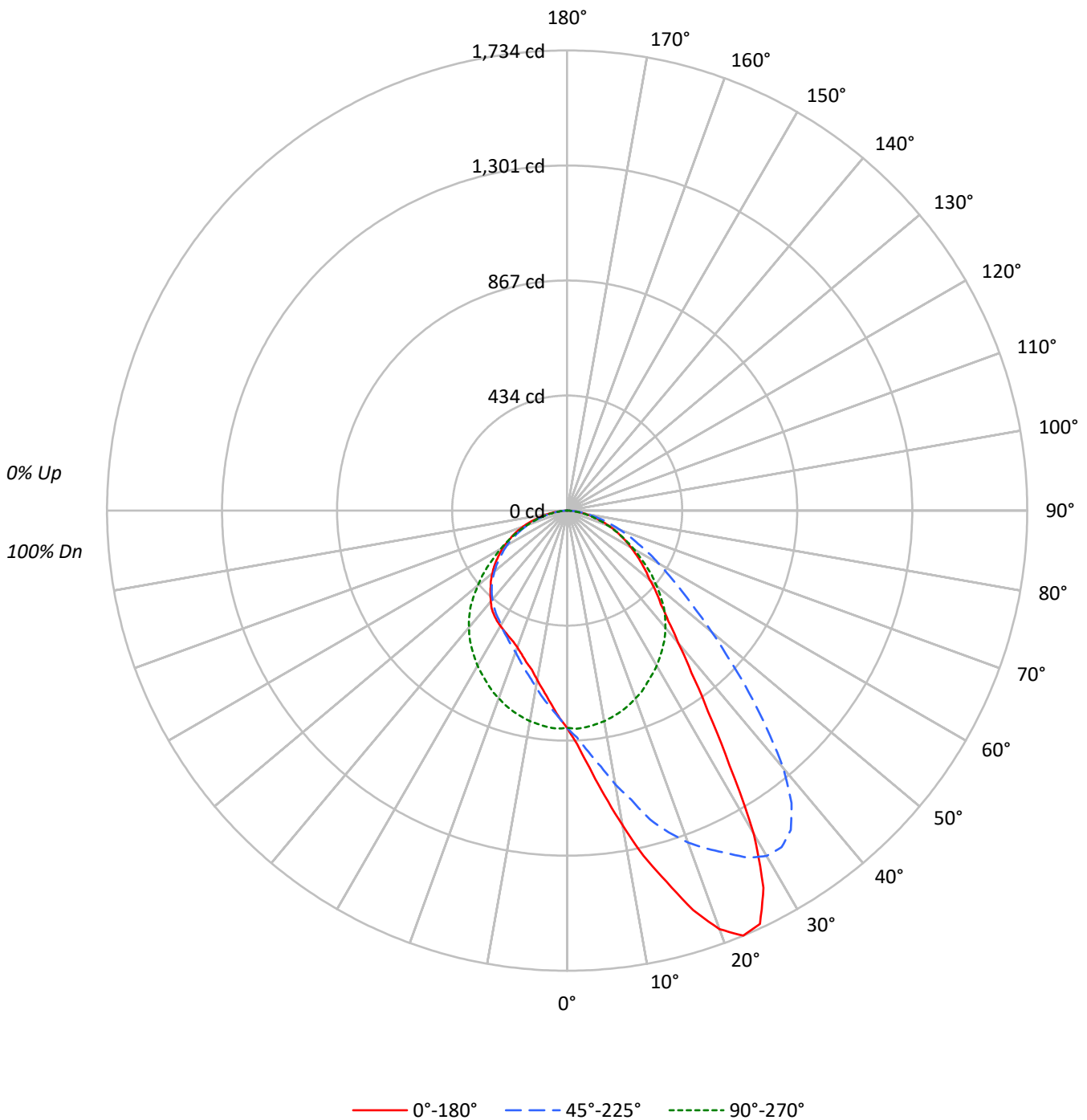
Lumens per Lamp: N/A
Luminaire Lumens: 2471.5 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.5
Luminous Opening: Rectangular (W 7.88' x L: 0.23' x H: 0')
CIE Type: Direct

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°	4884	4884	4884
5°	5824	4905	4347
10°	7290	4880	3926
15°	8941	4841	3655
20°	10652	4779	3480
25°	11310	4704	3441
30°	9694	4650	3459
35°	6742	4573	3495
40°	5078	4482	3483
45°	4216	4347	3440
50°	3777	4072	3409
55°	3531	3775	3367
60°	3314	3464	3331
65°	3113	3158	3226
70°	2919	2808	3073
75°	2613	2461	2816
80°	2288	2020	2425
85°	1793	1464	1629



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.5	3.3
10°-20°	258.7	10.5
20°-30°	435.2	17.6
30°-40°	491.9	19.9
40°-50°	440.6	17.8
50°-60°	355.6	14.4
60°-70°	247.8	10.0
70°-80°	130.1	5.3
80°-90°	31.2	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°	774.4	31.3
0°-40°	1266.3	51.2
0°-60°	2062.4	83.5
0°-90°	2471.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2471.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	819	819	819	819	819	
5°	973	912	819	742	726	100
15°	1448	1205	784	618	592	418
25°	1719	1424	715	531	523	760
35°	926	1469	628	469	480	598
45°	500	968	515	401	408	394
55°	340	526	363	310	324	305
65°	221	295	224	211	229	220
75°	113	140	107	106	122	121
85°	26	30	21	21	24	32
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°	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8
2.5°	881.6	880.8	878.8	880.4	877.2	872.8	872.4	868.4	857.0	856.2	853.0
5°	972.8	969.6	969.2	968.8	963.2	955.6	941.4	940.2	921.2	911.6	900.2
7.5°	1083.0	1081.8	1078.6	1075.2	1056.4	1047.4	1033.8	1016.4	994.2	972.8	959.2
10°	1203.6	1216.8	1200.4	1189.4	1179.0	1159.6	1137.0	1108.8	1080.6	1047.8	1022.8
12.5°	1333.0	1337.8	1337.8	1327.4	1310.0	1277.8	1233.4	1201.6	1176.2	1116.0	1094.6
15°	1448.0	1472.2	1456.8	1421.0	1421.8	1393.6	1341.4	1283.8	1253.2	1205.2	1139.8
17.5°	1578.2	1582.6	1577.8	1544.4	1528.2	1487.2	1440.0	1386.6	1329.0	1270.6	1202.8
20°	1678.2	1675.8	1661.8	1646.4	1612.2	1582.2	1529.4	1467.8	1388.6	1331.4	1255.6
22.5°	1733.6	1729.2	1724.6	1712.2	1685.2	1652.4	1606.4	1537.6	1463.0	1379.0	1288.6
25°	1718.6	1723.8	1724.6	1721.0	1711.0	1691.6	1654.4	1600.8	1525.4	1424.2	1333.0
27.5°	1602.0	1615.0	1631.6	1642.8	1660.6	1672.6	1660.6	1627.0	1565.0	1474.6	1362.4
30°	1407.6	1391.6	1431.0	1480.6	1514.2	1573.8	1607.2	1609.0	1577.8	1502.8	1394.0
32.5°	1137.8	1163.6	1175.4	1239.4	1323.0	1391.6	1466.2	1532.6	1548.0	1504.4	1412.8
35°	926.0	947.8	979.4	1011.2	1090.6	1158.8	1275.4	1377.0	1458.0	1468.6	1410.4
37.5°	769.6	782.4	801.8	835.4	889.8	974.4	1066.8	1198.8	1310.4	1389.0	1381.0
40°	652.2	655.4	678.0	702.2	744.2	810.8	892.2	1005.6	1146.2	1268.0	1318.6
42.5°	564.2	572.0	578.4	601.4	632.8	678.8	753.0	841.8	967.6	1112.4	1223.8
45°	499.8	507.8	513.8	529.2	553.0	586.8	639.6	725.2	823.2	968.0	1101.6
47.5°	455.4	454.6	459.8	472.0	489.2	516.2	555.0	612.2	706.2	827.2	967.2
50°	407.0	413.4	415.0	424.0	436.8	455.4	486.4	533.2	607.0	710.2	836.2
52.5°	373.0	373.8	378.8	384.8	395.6	409.0	434.8	469.0	522.8	607.0	720.4
55°	339.6	339.6	344.0	349.2	355.4	368.6	386.4	413.4	457.4	525.6	621.6
57.5°	308.6	310.2	314.2	315.4	321.0	330.0	345.6	367.0	400.6	455.8	535.2
60°	277.8	281.2	280.8	284.0	288.8	295.6	308.2	325.0	354.2	396.4	460.6
62.5°	250.8	249.6	249.6	253.6	258.2	264.6	271.8	285.6	309.4	345.6	398.0
65°	220.6	219.8	222.6	225.0	226.6	231.2	237.6	250.4	267.0	294.8	337.2
67.5°	194.4	192.0	194.0	194.8	197.6	201.6	207.8	215.8	229.4	252.8	286.8
70°	167.4	165.4	165.0	165.8	168.2	171.0	175.4	182.8	195.2	213.0	236.4
72.5°	139.6	138.4	138.4	140.4	141.2	142.8	145.6	152.4	161.4	173.8	195.2
75°	113.4	113.4	113.4	113.8	115.0	116.6	119.0	122.6	130.2	139.6	154.4
77.5°	89.6	90.0	89.2	88.8	90.8	91.6	92.0	96.0	100.4	107.6	119.0
80°	66.6	64.6	65.4	66.6	67.4	67.8	69.0	69.8	73.4	77.0	84.6
82.5°	45.2	43.6	43.6	45.6	45.6	46.0	47.2	48.4	49.2	52.4	55.6
85°	26.2	26.2	26.6	26.6	27.0	26.6	27.8	28.2	28.2	30.2	32.6
87.5°	12.0	11.2	11.6	12.0	11.6	12.0	12.2	12.6	13.0	13.4	13.8
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°	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8
2.5°	850.6	847.4	844.2	838.6	833.8	827.2	825.2	822.8	815.6	809.4	804.6
5°	895.8	886.2	872.4	859.6	849.4	835.4	827.6	819.2	807.4	796.6	787.8
7.5°	939.0	922.4	903.0	882.0	861.6	842.2	826.8	812.8	797.4	782.4	770.8
10°	992.6	965.6	935.4	903.0	875.2	848.2	825.6	805.8	784.4	765.6	750.2
12.5°	1053.6	1010.4	966.0	924.8	890.6	850.6	822.0	795.4	770.4	747.0	729.2
15°	1099.4	1048.6	999.4	945.0	895.0	848.2	815.6	784.0	755.8	732.8	710.6
17.5°	1144.6	1089.0	1026.4	960.8	902.2	848.2	803.8	769.6	735.2	707.4	686.0
20°	1181.8	1116.4	1043.0	974.4	907.6	845.8	795.8	753.0	714.8	685.2	660.2
22.5°	1214.0	1134.6	1058.0	983.4	907.2	839.4	781.2	736.8	694.6	665.6	638.8
25°	1234.2	1142.6	1066.4	980.2	897.4	828.4	764.8	714.8	673.6	639.6	612.2
27.5°	1253.2	1141.4	1055.2	962.4	885.4	816.8	748.6	695.0	651.8	615.0	586.8
30°	1272.2	1143.4	1035.8	944.2	866.4	795.0	729.2	675.2	629.2	591.6	565.4
32.5°	1284.2	1142.2	1018.0	918.8	836.2	775.2	708.2	651.8	604.2	567.4	542.4
35°	1287.4	1135.4	997.0	882.0	803.4	741.8	686.0	628.0	578.4	543.8	515.4
37.5°	1280.6	1123.2	974.0	848.6	763.6	702.6	653.8	604.2	556.6	518.2	493.2
40°	1258.8	1111.2	946.2	812.8	722.4	664.2	624.0	575.6	528.8	492.8	469.8
42.5°	1217.2	1087.0	915.6	773.2	679.6	621.2	585.2	546.6	503.0	469.8	446.8
45°	1144.2	1049.8	885.0	733.6	637.6	577.2	544.6	515.4	475.2	442.4	422.6
47.5°	1051.0	999.4	841.0	691.8	593.4	535.2	501.0	476.8	445.6	419.0	399.4
50°	953.0	934.2	796.2	649.0	549.4	492.8	460.2	438.8	417.8	391.2	373.8
52.5°	839.8	858.8	743.8	604.6	504.6	449.0	419.0	403.0	384.4	363.8	349.2
55°	735.2	776.8	682.0	553.8	460.2	407.0	378.0	363.0	351.8	335.6	322.6
57.5°	633.6	686.8	617.6	502.6	416.6	370.2	341.6	324.6	317.4	308.2	297.6
60°	545.0	597.4	547.8	451.0	372.6	328.8	304.2	290.4	283.2	277.4	268.6
62.5°	466.2	519.4	479.6	398.8	329.2	289.6	269.0	255.4	250.4	248.0	240.8
65°	395.2	440.8	413.0	344.0	288.4	252.8	233.2	223.8	218.6	217.4	212.6
67.5°	333.6	369.0	347.6	295.6	250.4	217.8	200.8	192.4	188.0	187.6	183.6
70°	273.4	305.8	290.4	244.4	206.6	182.4	168.2	161.0	158.6	158.2	156.4
72.5°	226.6	246.8	235.2	198.8	171.8	150.4	140.8	133.2	130.6	131.4	130.2
75°	174.6	191.6	184.4	157.8	134.4	120.2	111.4	106.8	104.4	105.6	104.0
77.5°	133.2	145.2	138.0	117.8	102.8	92.0	85.2	82.2	79.8	79.8	79.0
80°	94.8	101.2	97.6	86.4	74.6	65.8	60.6	58.8	57.6	57.2	56.8
82.5°	60.6	65.8	61.4	54.8	47.6	43.2	40.8	38.0	37.2	37.6	37.2
85°	34.2	36.2	34.6	29.8	26.6	24.2	22.6	21.4	20.6	21.0	20.2
87.5°	14.6	15.0	13.8	12.2	11.6	10.4	10.4	9.6	8.8	8.8	8.4
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°	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8	818.8
2.5°	801.8	799.0	795.0	789.0	784.4	776.8	776.8	778.0	778.0	777.6	776.8
5°	780.8	774.8	767.6	759.4	750.6	741.8	740.2	737.2	734.8	733.2	731.2
7.5°	759.4	749.4	739.4	728.0	718.0	709.8	703.8	698.6	695.4	691.8	689.0
10°	737.4	724.4	712.2	699.8	686.4	675.6	668.8	664.2	660.6	657.4	655.8
12.5°	711.8	696.2	682.4	670.8	655.8	644.6	638.4	636.8	632.4	624.8	620.8
15°	686.8	672.8	656.6	638.8	631.6	618.0	610.6	607.0	604.6	599.4	597.8
17.5°	666.0	647.4	628.8	615.8	602.6	592.0	587.6	582.8	579.6	574.8	573.6
20°	640.4	624.0	607.4	593.0	579.2	567.4	563.8	560.6	557.4	555.4	553.8
22.5°	614.2	597.8	584.8	571.6	556.6	549.8	545.8	542.4	540.4	539.2	537.6
25°	590.0	575.6	560.2	548.2	536.4	531.2	528.8	526.8	525.2	523.2	522.8
27.5°	568.4	552.6	539.6	528.0	519.4	515.0	512.2	511.0	511.0	511.8	512.2
30°	543.8	529.6	519.4	509.8	501.8	497.8	497.4	497.4	499.0	499.4	500.2
32.5°	521.2	510.2	499.8	490.8	485.2	482.8	484.8	484.8	486.0	487.2	488.8
35°	499.4	489.2	481.2	473.2	468.2	469.4	470.2	471.0	472.8	475.2	476.8
37.5°	478.8	469.4	461.0	454.6	451.4	453.8	455.8	457.4	459.8	461.8	463.4
40°	456.2	449.4	441.6	436.0	436.8	438.0	439.6	441.6	443.6	444.8	446.4
42.5°	435.2	428.0	422.6	418.2	419.4	421.0	421.8	422.6	424.8	427.2	428.0
45°	413.8	408.2	402.6	399.8	400.6	401.4	402.2	403.4	405.4	407.0	407.4
47.5°	389.6	385.6	382.0	378.8	380.4	380.0	381.2	383.6	384.4	385.2	387.6
50°	366.6	363.0	358.6	357.8	357.8	357.8	358.2	361.4	361.4	363.0	364.6
52.5°	341.2	339.2	336.8	335.2	334.4	334.4	336.4	337.6	338.4	340.8	342.4
55°	316.2	313.8	311.4	310.2	309.4	310.2	313.4	314.2	316.2	317.4	318.6
57.5°	290.0	288.4	286.4	285.6	285.6	286.0	288.4	290.4	290.8	294.8	296.4
60°	264.2	261.4	259.8	259.8	259.0	262.6	261.8	265.8	266.6	269.0	271.8
62.5°	237.6	233.6	233.2	233.2	234.8	235.2	236.8	238.0	240.4	243.6	245.6
65°	208.6	206.6	209.4	209.0	208.2	210.6	210.6	212.6	215.0	217.8	222.2
67.5°	181.6	180.2	181.0	180.6	181.6	183.2	184.4	186.0	188.8	192.0	194.8
70°	154.4	155.6	153.6	155.2	156.4	156.8	157.4	159.8	163.0	165.0	168.2
72.5°	127.8	127.4	128.2	128.6	129.8	130.6	131.4	134.0	137.6	139.2	141.6
75°	102.4	102.0	103.2	103.2	105.2	106.0	106.8	108.0	111.0	113.4	115.4
77.5°	79.4	79.8	79.4	81.0	80.2	80.6	83.0	84.2	84.6	89.6	90.4
80°	56.4	57.2	57.6	58.0	58.4	57.6	60.4	61.4	61.4	64.2	66.2
82.5°	36.4	36.8	38.0	38.4	38.4	39.6	39.2	40.0	41.2	42.0	44.8
85°	20.2	21.4	21.8	21.4	21.8	21.0	22.2	22.6	23.0	23.0	23.0
87.5°	8.0	8.4	8.0	8.4	8.0	8.4	8.4	7.6	7.6	8.8	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: P273731

CATALOG NUMBER: 8RCG-4-34D-L940-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	818.8	818.8	818.8	818.8
2.5°	774.0	773.6	776.4	774.4
5°	728.8	730.0	726.0	726.0
7.5°	688.0	686.4	686.8	684.0
10°	651.0	648.6	647.8	648.2
12.5°	620.4	620.4	614.2	614.2
15°	597.8	590.4	589.6	592.0
17.5°	572.8	568.4	568.8	568.0
20°	553.8	551.4	551.0	548.2
22.5°	536.4	536.0	536.4	533.2
25°	522.4	524.4	522.8	522.8
27.5°	513.0	513.0	511.8	511.8
30°	501.8	501.4	502.2	502.2
32.5°	490.8	491.6	491.6	492.0
35°	479.2	479.6	480.8	480.0
37.5°	464.2	466.2	465.8	466.6
40°	446.8	447.8	447.4	447.4
42.5°	428.8	429.6	428.4	427.6
45°	409.0	408.2	409.4	407.8
47.5°	387.2	387.6	388.0	389.6
50°	365.4	367.8	367.8	367.4
52.5°	344.0	344.8	346.8	346.8
55°	321.8	322.6	323.4	323.8
57.5°	299.2	298.8	300.4	300.8
60°	275.0	275.0	278.0	279.2
62.5°	249.2	250.8	253.8	251.6
65°	224.2	227.4	227.0	228.6
67.5°	198.0	200.0	203.2	203.2
70°	171.4	173.4	175.0	176.2
72.5°	145.6	146.4	150.8	148.4
75°	118.2	121.0	123.4	122.2
77.5°	92.0	95.6	96.4	95.2
80°	69.0	68.6	71.0	70.6
82.5°	46.0	45.6	46.4	46.8
85°	24.6	25.8	24.2	23.8
87.5°	7.2	7.2	6.8	6.4
90°	0.0	0.0	0.0	0.0

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