

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: NEO-RAY

Report Number: P333519-840

Luminaire Tested: **S125RDIP-S375D1205U840-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333519-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S375D1205U840-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5827.7 lumens
Efficiency: N/A
Efficacy: 138.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

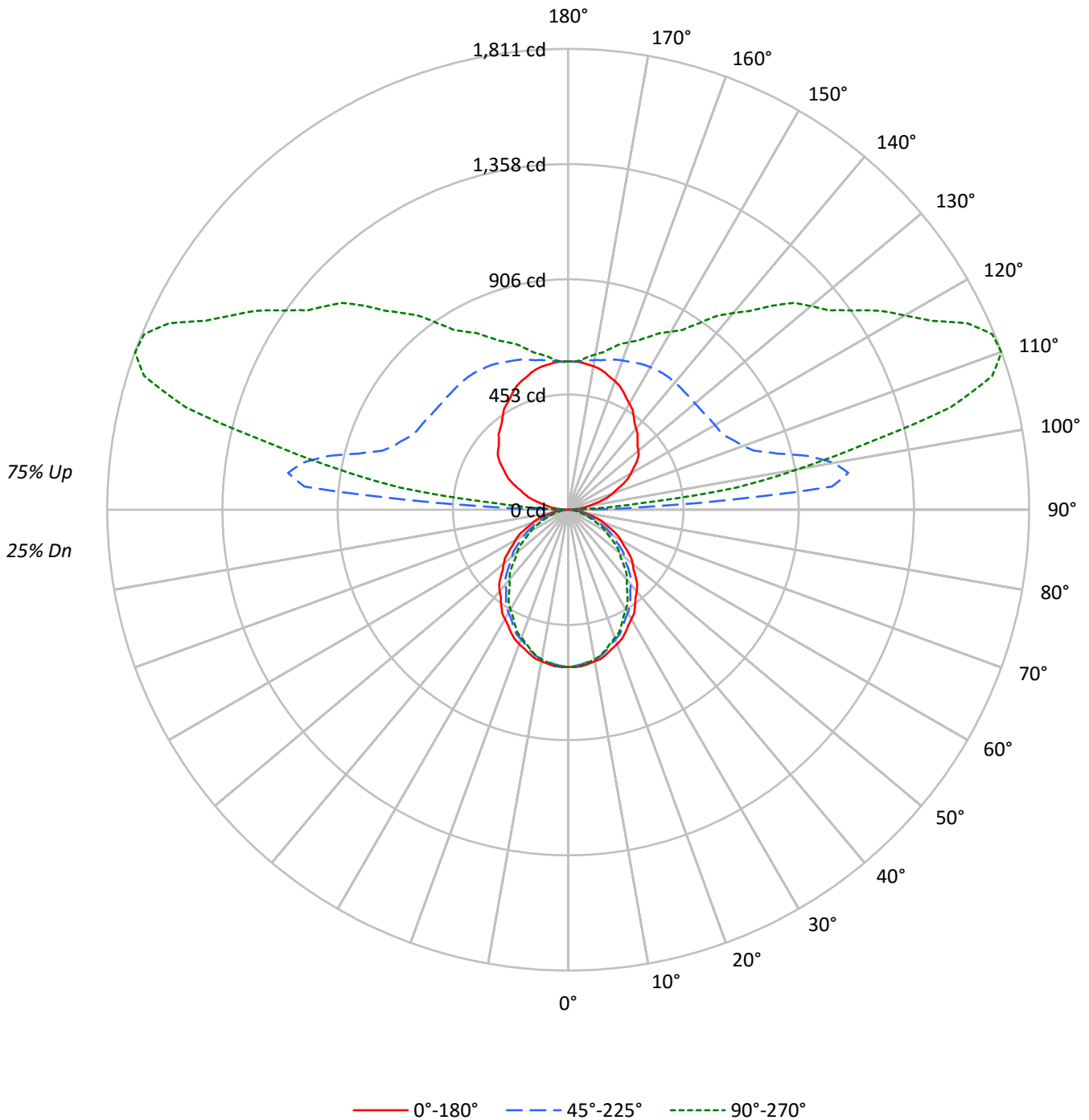
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333519-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F4

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25
1	92	88	84	81	82	79	76	73	61	59	57	45	43	42	29	29	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	23	22	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	26	21	19	18	13
5	64	53	46	40	57	48	41	36	37	33	29	28	25	22	19	17	15	12
6	59	48	40	34	52	43	36	31	34	29	25	25	22	19	17	15	14	10
7	55	43	35	30	48	39	32	27	30	26	22	23	19	17	15	14	12	9
8	50	39	31	26	45	35	28	24	28	23	20	21	17	15	14	12	11	8
9	47	35	28	23	42	32	26	21	25	21	17	19	16	14	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	16	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



TEST NUMBER: P333519-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.0
10°-20°	162.4	2.8
20°-30°	235.5	4.0
30°-40°	268.4	4.6
40°-50°	261.6	4.5
50°-60°	220.2	3.8
60°-70°	154.3	2.6
70°-80°	79.3	1.4
80°-90°	23.3	0.4
90°-100°	421.9	7.2
100°-110°	906.9	15.6
110°-120°	851.1	14.6
120°-130°	689.8	11.8
130°-140°	553.5	9.5
140°-150°	417.7	7.2
150°-160°	294.0	5.0
160°-170°	173.3	3.0
170°-180°	56.4	1.0
0°-30°	456.0	7.8
0°-40°	724.3	12.4
0°-60°	1206.1	20.7
0°-90°	1463.1	25.1
90°-120°	2179.9	37.4
90°-150°	3840.9	65.9
90°-180°	4365.0	74.9
0°-180°	5827.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	1	11	19	25	27	3
95°	39	114	1040	472	276	41
105°	133	185	851	1675	1555	140
115°	237	286	683	1472	1732	233
125°	328	385	655	1171	1365	291
135°	385	463	650	982	1134	299
145°	448	513	652	813	894	281
155°	512	550	636	719	750	236
165°	559	574	610	647	657	157
175°	581	581	586	593	590	55
180°	582	582	582	582	582	



TEST NUMBER: P333519-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.8	8.5	8.4	8.3	8.2	8.3	8.4	8.8	9.0	9.4	9.6
90°	1.2	2.3	4.6	7.1	9.4	11.7	12.9	15.2	16.5	18.8	20.0
92.5°	14.3	17.4	27.3	41.8	62.0	96.2	160.3	267.8	384.5	378.3	306.3
95°	38.7	39.9	49.3	62.2	88.0	140.8	266.4	524.5	848.4	1039.7	1017.3
97.5°	64.3	65.7	72.3	85.2	108.5	146.4	229.5	418.7	757.6	1110.2	1287.3
100°	82.1	84.5	89.2	102.1	124.4	159.6	227.6	380.2	675.9	1059.6	1352.9
102.5°	101.9	103.3	107.0	120.9	141.3	175.5	236.1	364.3	613.9	970.4	1313.5
105°	132.6	132.6	138.5	150.2	169.0	201.9	253.5	357.9	553.8	850.7	1187.5
107.5°	162.6	165.0	170.6	180.3	199.8	229.2	279.2	368.7	528.5	768.3	1058.9
110°	184.2	186.6	191.3	201.9	219.4	249.9	298.0	379.0	521.0	729.8	985.6



TEST NUMBER: P333519-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	205.8	208.1	211.9	222.5	240.0	269.6	315.9	392.1	521.0	707.3	931.2
115°	237.0	239.3	242.9	253.5	271.0	300.4	343.9	411.8	524.5	683.0	871.8
117.5°	265.2	268.7	272.5	283.1	303.0	331.3	372.4	434.4	532.3	671.0	836.4
120°	284.0	287.5	292.2	302.8	322.7	352.0	393.1	449.4	539.8	665.3	816.7
122.5°	303.7	306.3	310.0	320.5	342.4	371.7	412.8	466.4	546.3	660.7	799.8
125°	328.5	330.9	336.8	347.3	369.6	400.1	438.9	489.3	557.3	654.8	776.8
127.5°	348.0	351.5	359.1	372.4	396.2	426.7	463.9	510.5	569.8	652.0	755.7
130°	360.2	363.8	373.1	388.4	413.0	443.5	479.9	524.5	577.3	650.1	741.6
132.5°	369.6	374.1	385.4	402.5	428.1	458.6	494.9	536.7	585.7	650.1	730.3
135°	384.9	389.6	403.6	422.4	447.1	478.8	515.1	553.8	597.2	650.1	717.0
137.5°	404.1	407.7	420.8	439.6	463.7	496.3	529.5	566.5	607.8	651.5	705.0
140°	415.4	418.9	433.0	451.8	474.0	505.7	539.8	575.0	612.5	652.4	699.3
142.5°	428.5	431.1	444.2	463.0	484.4	514.2	546.3	579.7	615.3	653.4	694.7
145°	448.3	450.6	462.3	478.8	499.9	526.8	557.3	586.7	618.4	652.4	687.6
147.5°	468.9	470.3	480.4	495.6	513.9	537.7	564.4	591.0	619.6	649.3	680.3
150°	481.1	483.4	491.7	507.0	523.3	543.3	569.1	593.8	619.6	646.5	674.7
152.5°	494.2	495.6	502.9	516.3	531.8	549.9	573.8	595.6	618.6	642.8	668.1
155°	511.6	511.6	518.7	530.4	542.1	558.6	578.5	597.2	616.0	636.0	657.1
157.5°	527.1	526.8	532.5	542.6	552.9	565.3	582.5	598.4	613.0	628.9	646.8
160°	537.5	536.2	541.0	549.2	558.6	569.1	584.4	598.4	610.2	624.3	638.3
162.5°	545.8	544.7	549.4	556.6	564.2	572.9	586.2	597.5	607.3	618.6	630.9
165°	558.6	556.2	559.8	565.6	570.3	577.3	586.7	596.1	603.1	610.2	619.6
167.5°	567.0	565.8	567.9	571.2	574.5	579.0	586.7	593.3	596.5	602.0	608.5
170°	572.6	571.5	572.6	575.0	577.3	580.9	586.7	591.4	593.8	597.2	602.0
172.5°	576.4	574.3	575.4	577.7	579.2	580.9	585.7	589.6	590.0	591.7	595.4
175°	580.9	578.5	579.7	580.9	580.9	580.9	584.4	586.7	585.5	585.5	586.7
177.5°	583.0	581.1	581.1	582.0	581.1	581.1	583.0	583.9	582.0	582.0	583.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0



TEST NUMBER: P333519-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	9.8	10.1	10.3	10.7	10.6	10.6	10.7	10.6
90°	21.1	22.3	23.4	25.9	25.9	25.9	27.0	27.0
92.5°	207.9	150.9	113.6	96.2	81.2	78.4	76.7	74.8
95°	843.6	665.3	521.0	422.4	339.1	303.9	294.6	275.8
97.5°	1256.5	1131.5	990.9	853.7	781.2	715.6	681.6	666.5
100°	1443.3	1385.8	1265.0	1142.9	1062.0	977.4	934.0	915.2
102.5°	1506.2	1541.7	1483.7	1401.1	1314.4	1254.4	1207.2	1193.2
105°	1469.2	1629.9	1681.5	1668.6	1631.0	1592.4	1568.8	1554.8
107.5°	1336.8	1551.3	1683.8	1745.1	1764.1	1763.9	1756.2	1746.8
110°	1239.1	1462.1	1627.5	1727.3	1780.1	1802.4	1810.6	1810.6



TEST NUMBER: P333519-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1162.2	1373.8	1541.2	1658.7	1736.0	1774.2	1794.6	1803.1
115°	1065.5	1247.4	1408.1	1536.0	1627.5	1683.8	1716.7	1731.9
117.5°	1003.0	1159.8	1298.3	1415.6	1507.1	1565.4	1598.0	1607.3
120°	969.3	1110.0	1239.1	1342.4	1429.3	1485.5	1517.2	1526.6
122.5°	943.9	1074.4	1189.4	1286.1	1363.5	1415.1	1446.8	1455.3
125°	907.1	1026.7	1128.8	1213.4	1279.0	1327.2	1352.9	1364.7
127.5°	869.5	981.2	1076.5	1155.6	1215.2	1257.7	1282.1	1287.3
130°	846.1	949.3	1040.9	1117.1	1175.8	1214.5	1238.0	1245.0
132.5°	822.5	919.3	1002.3	1075.8	1134.5	1173.2	1194.8	1202.7
135°	792.0	873.0	948.2	1015.0	1066.6	1105.4	1126.5	1133.6
137.5°	766.3	831.7	894.1	951.0	997.1	1032.4	1051.9	1059.6
140°	752.1	807.3	861.3	910.6	954.0	984.5	1002.1	1007.9
142.5°	739.9	786.7	833.1	875.9	912.7	938.5	955.1	960.1
145°	724.0	760.3	796.8	828.4	856.6	876.6	889.5	894.1
147.5°	709.0	738.5	766.5	790.4	812.7	828.7	836.2	838.3
150°	700.5	726.4	748.6	769.7	787.4	801.4	806.2	807.3
152.5°	691.2	714.2	734.6	751.0	765.8	777.0	781.7	782.9
155°	677.0	695.8	712.3	725.2	736.9	745.1	748.6	749.8
157.5°	663.0	678.4	691.2	701.3	710.3	717.2	720.4	720.2
160°	653.6	665.3	677.0	685.3	693.5	699.3	701.8	700.5
162.5°	643.3	654.1	663.9	671.2	677.5	682.5	683.0	682.7
165°	628.9	637.1	644.2	650.1	654.8	657.1	657.1	657.1
167.5°	615.3	620.8	626.1	630.4	632.7	634.8	633.9	633.7
170°	607.8	611.4	614.9	617.2	619.6	620.8	620.8	619.6
172.5°	599.4	602.9	605.5	606.9	607.3	609.5	607.6	606.4
175°	590.3	590.3	592.6	592.6	592.6	593.8	591.4	590.3
177.5°	583.9	584.8	584.8	584.8	583.9	584.8	582.0	582.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0

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