

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: P333507-830

Luminaire Tested: **S125RDIP-S375D810U830-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333507-830
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-S375D810U830-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4105.8 lumens
Efficiency: N/A
Efficacy: 131.6 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

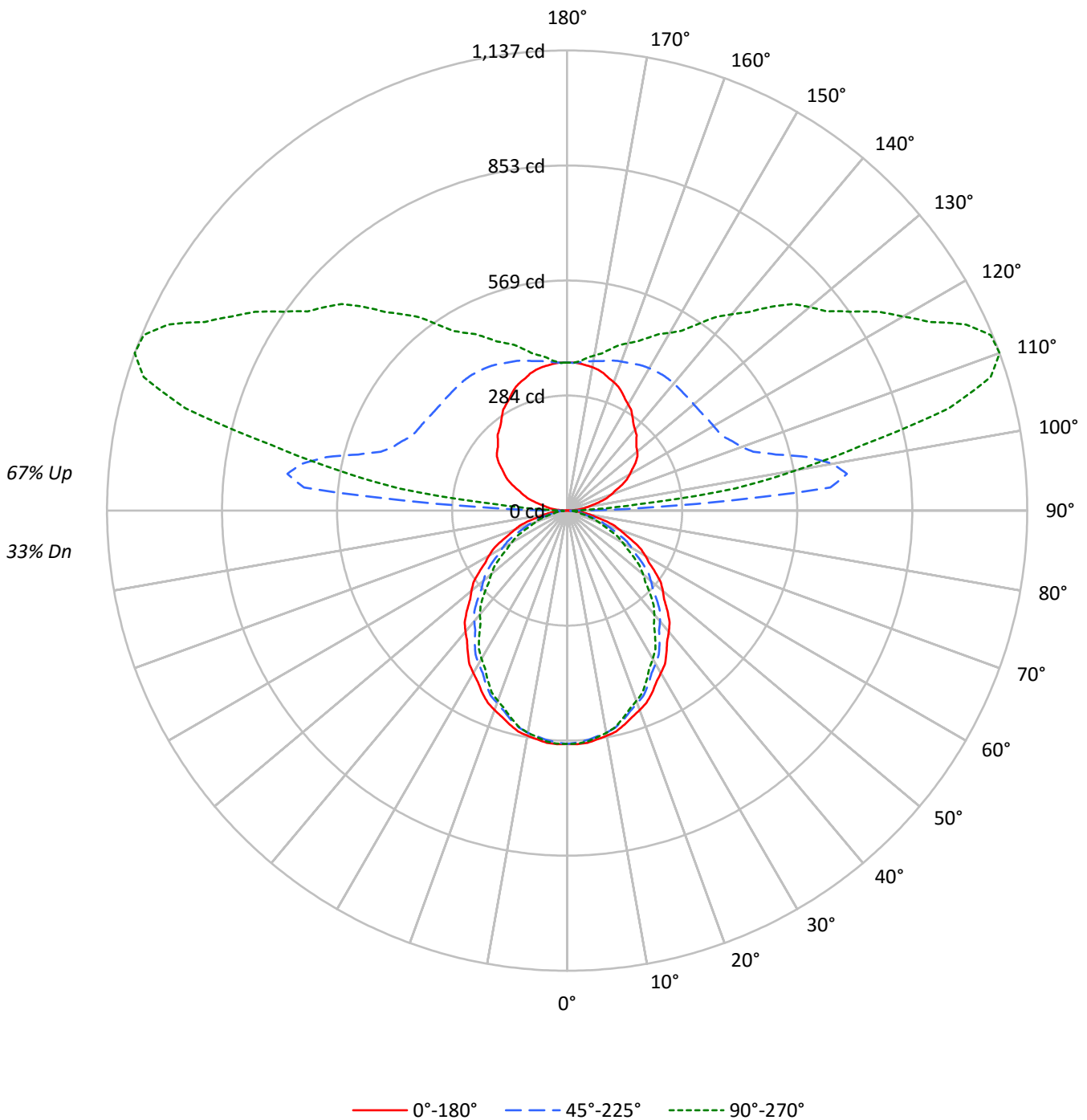
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333507-830

CATALOG NUMBER: S125RDIP-S375D810U830-4F0-1E-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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35	28
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	27	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	32	29	25	23	22	18
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	29	33	28	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12	10
10	45	33	26	22	41	30	24	20	25	20	17	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3725	3725	3725
5°	3734	3691	3713
10°	3705	3657	3657
15°	3661	3582	3553
20°	3604	3478	3437
25°	3539	3377	3302
30°	3456	3258	3155
35°	3372	3136	2988
40°	3295	3008	2824
45°	3199	2865	2645
50°	3104	2710	2460
55°	2992	2559	2262
60°	2880	2381	2047
65°	2749	2170	1803
70°	2598	1907	1554
75°	2393	1609	1293
80°	2105	1261	1086
85°	1771	1030	971



TEST NUMBER: P333507-830

CATALOG NUMBER: S125RDIP-S375D810U830-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.3
10°-20°	151.6	3.7
20°-30°	219.8	5.4
30°-40°	250.5	6.1
40°-50°	244.1	5.9
50°-60°	205.5	5.0
60°-70°	144.1	3.5
70°-80°	74.1	1.8
80°-90°	20.7	0.5
90°-100°	264.9	6.5
100°-110°	569.6	13.9
110°-120°	534.5	13.0
120°-130°	433.2	10.6
130°-140°	347.7	8.5
140°-150°	262.4	6.4
150°-160°	184.7	4.5
160°-170°	108.8	2.7
170°-180°	35.4	0.9
0°-30°	425.6	10.4
0°-40°	676.0	16.5
0°-60°	1125.7	27.4
0°-90°	1364.6	33.2
90°-120°	1369.1	33.3
90°-150°	2412.3	58.8
90°-180°	2741.0	66.8
0°-180°	4105.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	576	574	569	573	573	55
15°	548	545	536	535	531	154
25°	497	490	474	468	463	228
35°	428	417	398	385	379	268
45°	350	337	314	297	290	270
55°	266	251	227	208	201	238
65°	180	165	142	125	118	178
75°	96	83	64	55	52	101
85°	24	16	14	14	13	27
90°	1	7	12	15	17	3
95°	24	72	653	296	173	26
105°	83	116	534	1052	976	88
115°	149	179	429	925	1088	146
125°	206	242	411	736	857	183
135°	242	291	408	616	712	188
145°	282	322	410	510	562	176
155°	321	346	399	451	471	148
165°	351	360	383	406	413	99
175°	365	365	368	372	371	35
180°	366	366	366	366	366	



TEST NUMBER: P333507-830

CATALOG NUMBER: S125RDIP-S375D810U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	577.8	577.6	577.3	577.1	576.8	576.4	575.6	574.8	574.0	573.3	574.0
5°	575.9	575.5	575.1	574.7	574.3	573.6	572.5	571.5	570.4	569.3	570.3
7.5°	570.2	569.9	569.5	569.1	568.7	567.9	566.7	565.3	564.1	562.8	563.5
10°	565.0	564.7	564.4	564.1	563.8	563.0	561.7	560.2	558.9	557.6	557.9
12.5°	559.0	558.6	558.4	558.0	557.6	556.5	554.7	552.9	551.0	549.2	549.4
15°	547.5	547.0	546.4	545.8	545.3	543.9	541.9	539.9	537.8	535.8	535.7
17.5°	534.6	533.7	532.8	531.9	531.0	529.3	526.7	524.1	521.6	519.1	518.6
20°	524.4	523.5	522.5	521.6	520.6	518.6	515.5	512.4	509.3	506.1	505.7
22.5°	513.3	512.4	511.4	510.4	509.4	507.4	504.1	500.9	497.6	494.4	493.4
25°	496.6	495.1	493.7	492.2	490.8	488.2	484.7	481.1	477.5	473.9	472.7
27.5°	477.4	475.7	473.9	472.1	470.3	467.6	463.7	459.9	456.1	452.2	450.4
30°	463.4	461.7	459.8	458.0	456.1	453.2	449.1	445.1	441.0	436.9	434.7
32.5°	449.9	447.7	445.6	443.5	441.3	438.2	434.0	429.9	425.7	421.6	419.1
35°	427.7	425.5	423.1	420.8	418.5	415.1	410.8	406.4	402.1	397.8	394.9
37.5°	406.0	403.2	400.4	397.6	394.7	391.1	386.6	382.1	377.7	373.2	369.8
40°	390.8	387.9	384.9	382.0	379.1	375.3	370.7	366.1	361.4	356.8	353.1
42.5°	374.7	371.7	368.7	365.8	362.8	358.9	354.1	349.3	344.5	339.7	336.2
45°	350.2	347.4	344.6	341.8	339.0	334.9	329.6	324.3	319.0	313.7	309.7
47.5°	324.9	321.9	319.0	315.9	313.0	308.9	303.5	298.1	292.8	287.4	283.4
50°	308.9	305.7	302.5	299.3	296.1	291.7	286.2	280.7	275.1	269.7	265.6
52.5°	291.4	288.1	284.8	281.6	278.3	274.1	268.9	263.6	258.4	253.3	248.9
55°	265.7	262.6	259.5	256.5	253.4	249.1	243.6	238.2	232.8	227.3	223.0
57.5°	239.8	236.5	233.1	229.8	226.5	222.3	217.0	211.8	206.6	201.3	197.1
60°	223.0	219.6	216.2	212.8	209.4	205.2	199.9	194.7	189.5	184.3	180.0
62.5°	205.3	202.0	198.8	195.6	192.3	188.0	182.8	177.5	172.1	166.8	162.9
65°	179.9	176.6	173.3	170.0	166.7	162.5	157.4	152.3	147.1	142.0	138.2
67.5°	154.8	151.5	148.2	144.9	141.6	137.4	132.5	127.6	122.7	117.8	114.2
70°	137.6	134.4	131.1	127.8	124.5	120.5	115.6	110.7	105.9	101.0	98.0
72.5°	120.9	117.7	114.5	111.3	108.1	104.2	99.6	95.1	90.6	86.1	83.3
75°	95.9	92.9	90.0	87.1	84.3	80.8	76.6	72.6	68.5	64.5	62.3
77.5°	70.9	68.6	66.3	63.9	61.6	58.8	55.6	52.3	49.1	45.8	44.3
80°	56.6	54.3	52.0	49.7	47.3	44.9	42.1	39.4	36.7	33.9	33.1
82.5°	42.7	40.6	38.5	36.4	34.3	32.3	30.5	28.7	26.8	24.9	24.5
85°	23.9	22.2	20.5	18.8	17.0	15.8	15.4	14.9	14.4	13.9	13.9
87.5°	8.2	7.7	7.5	7.3	7.1	7.0	7.1	7.3	7.4	7.5	7.7
90°	0.8	1.5	2.9	4.4	5.9	7.4	8.1	9.6	10.3	11.8	12.5
92.5°	9.0	10.9	17.1	26.2	38.9	60.4	100.7	168.1	241.4	237.6	192.4
95°	24.3	25.1	30.9	39.0	55.2	88.4	167.3	329.4	532.8	653.0	638.9
97.5°	40.3	41.3	45.4	53.5	68.1	92.0	144.1	263.0	475.8	697.3	808.4
100°	51.6	53.1	56.0	64.1	78.1	100.2	143.0	238.7	424.5	665.5	849.7
102.5°	64.0	64.8	67.2	75.9	88.7	110.3	148.3	228.8	385.6	609.4	825.0
105°	83.3	83.3	87.0	94.3	106.1	126.8	159.2	224.8	347.9	534.3	745.8
107.5°	102.2	103.6	107.2	113.2	125.5	144.0	175.4	231.6	332.0	482.6	665.1
110°	115.7	117.2	120.1	126.8	137.8	156.9	187.2	238.1	327.3	458.4	619.1



TEST NUMBER: P333507-830

CATALOG NUMBER: S125RDIP-S375D810U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	129.2	130.7	133.1	139.7	150.8	169.4	198.4	246.3	327.3	444.2	584.8
115°	148.8	150.3	152.6	159.2	170.2	188.7	215.9	258.6	329.4	429.0	547.5
117.5°	166.5	168.8	171.2	177.8	190.3	208.1	233.9	272.9	334.3	421.4	525.3
120°	178.3	180.6	183.5	190.1	202.6	221.1	246.9	282.3	339.0	417.8	512.9
122.5°	190.8	192.4	194.7	201.3	215.1	233.5	259.3	292.8	343.1	414.9	502.3
125°	206.3	207.8	211.5	218.1	232.1	251.3	275.6	307.3	350.1	411.2	487.9
127.5°	218.6	220.8	225.6	233.9	248.8	268.0	291.4	320.6	357.9	409.4	474.6
130°	226.2	228.5	234.3	243.9	259.4	278.6	301.4	329.4	362.6	408.3	465.8
132.5°	232.1	235.0	242.0	252.8	268.8	288.0	310.9	337.1	367.9	408.3	458.7
135°	241.8	244.7	253.5	265.3	280.8	300.7	323.6	347.9	375.1	408.3	450.3
137.5°	253.8	256.0	264.3	276.1	291.2	311.7	332.5	355.8	381.7	409.2	442.8
140°	260.9	263.1	271.9	283.7	297.7	317.6	339.0	361.1	384.7	409.7	439.2
142.5°	269.1	270.8	279.0	290.8	304.3	322.9	343.1	364.1	386.4	410.4	436.3
145°	281.5	283.0	290.4	300.7	314.0	330.9	350.1	368.4	388.4	409.7	431.9
147.5°	294.5	295.4	301.7	311.3	322.8	337.7	354.5	371.2	389.1	407.8	427.3
150°	302.2	303.6	308.8	318.4	328.7	341.2	357.4	372.9	389.1	406.0	423.8
152.5°	310.4	311.3	315.8	324.2	334.0	345.3	360.3	374.1	388.5	403.7	419.6
155°	321.3	321.3	325.7	333.1	340.4	350.8	363.4	375.1	386.9	399.4	412.7
157.5°	331.0	330.9	334.4	340.7	347.2	355.1	365.8	375.9	385.0	395.0	406.2
160°	337.5	336.8	339.8	344.9	350.8	357.4	367.0	375.9	383.2	392.1	401.0
162.5°	342.8	342.1	345.1	349.6	354.3	359.8	368.2	375.2	381.4	388.5	396.2
165°	350.8	349.3	351.6	355.2	358.2	362.6	368.4	374.4	378.8	383.2	389.1
167.5°	356.1	355.3	356.7	358.7	360.8	363.6	368.4	372.6	374.7	378.1	382.2
170°	359.7	358.9	359.7	361.1	362.6	364.8	368.4	371.5	372.9	375.1	378.1
172.5°	362.0	360.7	361.4	362.9	363.7	364.8	367.9	370.2	370.5	371.6	373.9
175°	364.8	363.4	364.1	364.8	364.8	364.8	367.0	368.4	367.8	367.8	368.4
177.5°	366.1	365.0	365.0	365.5	365.0	365.0	366.1	366.7	365.5	365.5	366.1
180°	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5



TEST NUMBER: P333507-830

CATALOG NUMBER: S125RDIP-S375D810U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	574.8	575.6	576.4	576.7	576.6	576.6	576.5	576.4
5°	571.3	572.2	573.2	573.6	573.4	573.2	573.0	572.8
7.5°	564.1	564.9	565.5	565.7	565.5	565.3	565.1	564.9
10°	558.2	558.5	558.7	558.7	558.5	558.2	557.9	557.6
12.5°	549.6	549.9	550.1	550.0	549.5	549.0	548.7	548.2
15°	535.6	535.5	535.4	534.9	534.0	533.2	532.3	531.4
17.5°	518.1	517.6	517.2	516.5	515.9	515.1	514.3	513.7
20°	505.2	504.7	504.3	503.6	502.7	501.8	501.0	500.1
22.5°	492.4	491.4	490.5	489.7	489.0	488.2	487.6	486.8
25°	471.5	470.1	468.9	467.8	466.7	465.6	464.6	463.4
27.5°	448.7	447.0	445.2	443.8	442.8	441.8	440.7	439.7
30°	432.4	430.3	428.0	426.5	425.6	424.7	423.9	423.0
32.5°	416.7	414.2	411.7	410.0	408.9	407.7	406.6	405.6
35°	392.1	389.3	386.4	384.4	383.0	381.7	380.3	379.0
37.5°	366.4	363.1	359.7	357.3	356.0	354.7	353.4	352.0
40°	349.4	345.7	342.0	339.6	338.5	337.3	336.1	335.0
42.5°	332.6	329.1	325.6	323.0	321.3	319.5	317.8	316.1
45°	305.9	302.0	298.1	295.5	294.1	292.6	291.2	289.6
47.5°	279.5	275.4	271.5	268.6	267.0	265.4	263.8	262.2
50°	261.5	257.4	253.4	250.6	249.2	247.7	246.3	244.8
52.5°	244.5	240.2	235.7	232.8	231.4	230.0	228.5	227.1
55°	218.7	214.3	210.0	207.0	205.5	203.9	202.4	200.9
57.5°	192.8	188.6	184.3	181.4	180.1	178.7	177.4	176.0
60°	175.8	171.4	167.2	164.4	162.9	161.5	160.0	158.5
62.5°	158.9	155.0	151.0	148.4	146.8	145.4	144.0	142.5
65°	134.2	130.4	126.5	123.9	122.4	120.9	119.5	118.0
67.5°	110.7	107.2	103.6	101.2	100.1	99.0	97.7	96.6
70°	95.1	92.1	89.1	87.0	85.8	84.6	83.5	82.3
72.5°	80.5	77.8	75.0	73.2	72.5	71.7	70.9	70.1
75°	60.2	58.1	56.0	54.6	53.9	53.2	52.5	51.8
77.5°	42.9	41.4	39.9	38.8	38.4	37.9	37.3	36.9
80°	32.2	31.4	30.5	30.0	29.8	29.6	29.4	29.2
82.5°	24.1	23.7	23.3	23.0	22.9	22.8	22.7	22.5
85°	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1
87.5°	7.9	8.0	8.2	8.4	8.4	8.3	8.4	8.3
90°	13.3	14.0	14.7	16.2	16.2	16.2	17.0	17.0
92.5°	130.6	94.8	71.4	60.4	51.0	49.2	48.2	47.0
95°	529.9	417.8	327.3	265.3	213.0	190.9	185.0	173.1
97.5°	789.2	710.6	622.3	536.2	490.7	449.4	428.0	418.6
100°	906.4	870.3	794.5	717.8	666.9	613.9	586.6	574.9
102.5°	945.9	968.3	931.8	880.0	825.6	787.8	758.2	749.3
105°	922.7	1023.7	1056.1	1048.0	1024.4	1000.0	985.3	976.5
107.5°	839.5	974.3	1057.5	1096.0	1108.0	1107.8	1103.0	1097.0
110°	778.3	918.2	1022.2	1084.8	1117.9	1132.0	1137.2	1137.2



TEST NUMBER: P333507-830

CATALOG NUMBER: S125RDIP-S375D810U830-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	729.9	862.8	967.9	1041.8	1090.2	1114.3	1127.1	1132.5
115°	669.2	783.4	884.4	964.7	1022.2	1057.5	1078.2	1087.8
117.5°	630.0	728.4	815.4	889.1	946.6	983.1	1003.6	1009.5
120°	608.7	697.2	778.3	843.1	897.6	933.0	952.9	958.8
122.5°	592.9	674.8	747.0	807.8	856.4	888.8	908.7	914.0
125°	569.7	644.9	709.0	762.0	803.3	833.5	849.7	857.1
127.5°	546.1	616.2	676.1	725.8	763.2	789.9	805.2	808.4
130°	531.3	596.3	653.7	701.6	738.5	762.8	777.5	781.9
132.5°	516.6	577.3	629.5	675.6	712.5	736.8	750.4	755.4
135°	497.5	548.3	595.5	637.4	669.9	694.2	707.5	711.9
137.5°	481.3	522.4	561.6	597.2	626.3	648.4	660.6	665.5
140°	472.4	507.0	540.9	571.8	599.2	618.3	629.3	633.0
142.5°	464.8	494.1	523.2	550.1	573.3	589.5	599.9	602.9
145°	454.7	477.6	500.4	520.3	538.0	550.5	558.6	561.6
147.5°	445.3	463.8	481.4	496.4	510.4	520.5	525.2	526.5
150°	440.0	456.2	470.1	483.4	494.6	503.3	506.3	507.0
152.5°	434.0	448.6	461.4	471.6	481.0	488.0	491.0	491.7
155°	425.3	437.1	447.3	455.4	462.8	468.0	470.1	470.9
157.5°	416.4	426.1	434.0	440.5	446.2	450.4	452.5	452.3
160°	410.5	417.8	425.3	430.4	435.5	439.2	440.7	440.0
162.5°	404.0	410.8	417.0	421.5	425.6	428.6	429.0	428.8
165°	395.0	400.2	404.6	408.3	411.2	412.7	412.7	412.7
167.5°	386.4	389.8	393.2	395.9	397.4	398.7	398.1	397.9
170°	381.7	384.0	386.2	387.7	389.1	389.8	389.8	389.1
172.5°	376.5	378.6	380.3	381.2	381.4	382.8	381.6	380.9
175°	370.7	370.7	372.2	372.2	372.2	372.9	371.5	370.7
177.5°	366.7	367.3	367.3	367.3	366.7	367.3	365.5	365.5
180°	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5

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