

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: P333507-927

Luminaire Tested: **S125RDIP-S375D810U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333507-927  
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-S375D810U927-4F0-1E-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: 3450.8 lumens  
Efficiency: N/A  
Efficacy: 110.6 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

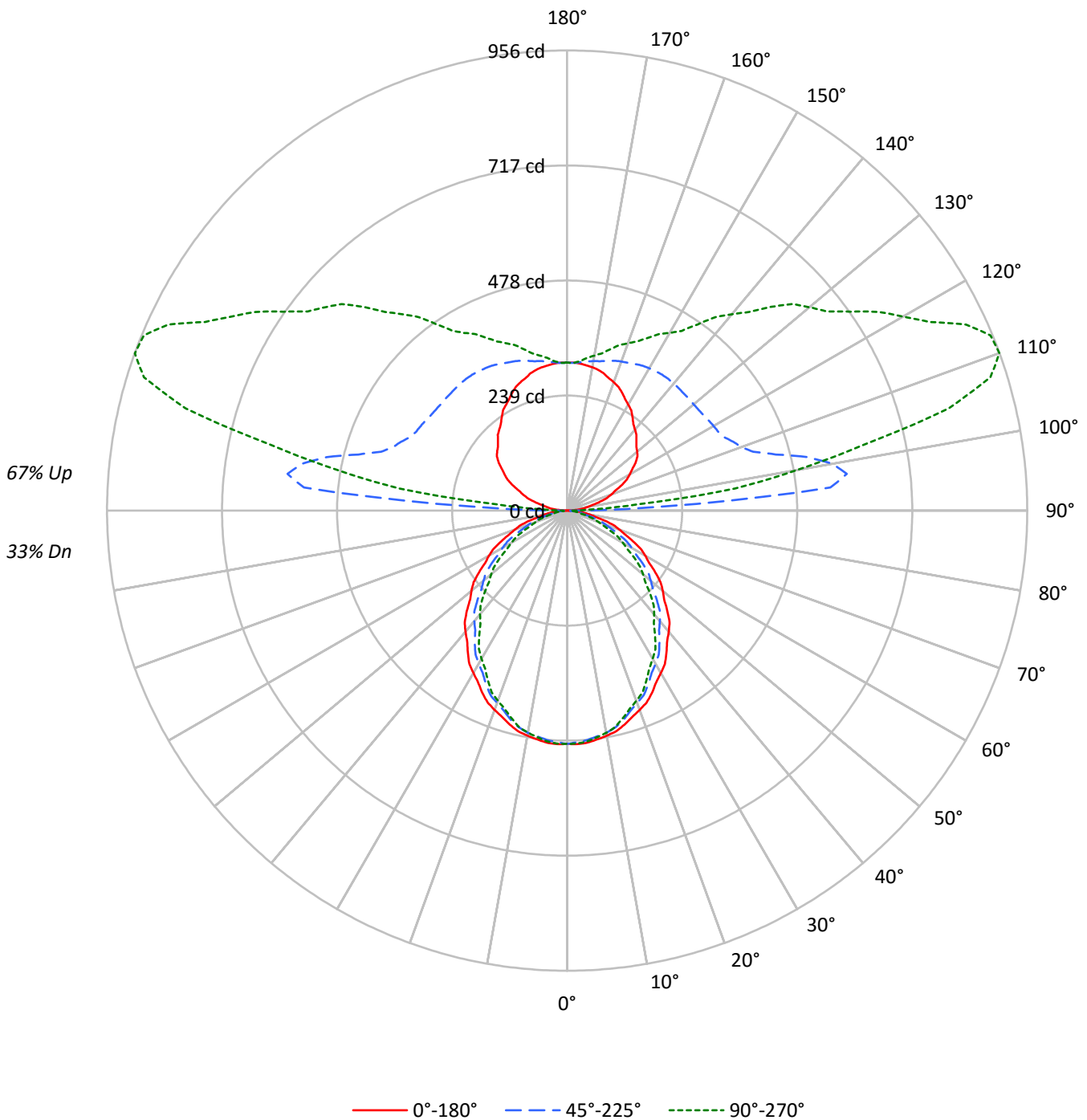
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3130	3130	3130
5°	3138	3102	3121
10°	3114	3074	3074
15°	3077	3011	2986
20°	3030	2924	2889
25°	2974	2838	2776
30°	2905	2738	2651
35°	2834	2636	2511
40°	2769	2528	2373
45°	2689	2408	2223
50°	2608	2277	2067
55°	2514	2152	1901
60°	2421	2001	1721
65°	2311	1825	1516
70°	2185	1603	1307
75°	2011	1352	1088
80°	1770	1060	915
85°	1489	867	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.6	1.3
10°-20°	127.4	3.7
20°-30°	184.7	5.4
30°-40°	210.5	6.1
40°-50°	205.2	5.9
50°-60°	172.7	5.0
60°-70°	121.1	3.5
70°-80°	62.2	1.8
80°-90°	17.4	0.5
90°-100°	222.7	6.5
100°-110°	478.7	13.9
110°-120°	449.3	13.0
120°-130°	364.1	10.6
130°-140°	292.2	8.5
140°-150°	220.5	6.4
150°-160°	155.2	4.5
160°-170°	91.5	2.7
170°-180°	29.8	0.9
0°-30°	357.7	10.4
0°-40°	568.2	16.5
0°-60°	946.1	27.4
0°-90°	1146.9	33.2
90°-120°	1150.7	33.3
90°-150°	2027.5	58.8
90°-180°	2304.0	66.8
0°-180°	3450.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	484	482	478	482	481	46
15°	460	458	450	450	447	130
25°	417	411	398	394	390	192
35°	360	350	334	324	318	225
45°	294	283	264	249	243	227
55°	223	211	191	175	169	200
65°	151	138	119	105	99	150
75°	81	69	54	46	44	85
85°	20	14	12	11	11	23
90°	1	6	10	13	14	2
95°	20	60	549	249	146	22
105°	70	98	449	884	821	74
115°	125	151	360	777	914	123
125°	173	203	346	618	720	154
135°	203	244	343	518	598	158
145°	237	271	344	429	472	148
155°	270	290	336	379	396	124
165°	295	303	322	342	347	83
175°	307	307	309	313	312	29
180°	307	307	307	307	307	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	485.6	485.4	485.2	485.1	484.8	484.4	483.8	483.1	482.4	481.8	482.4
5°	484.0	483.7	483.4	483.0	482.7	482.1	481.2	480.3	479.4	478.5	479.3
7.5°	479.3	479.0	478.6	478.3	478.0	477.3	476.3	475.2	474.1	473.0	473.6
10°	474.8	474.6	474.4	474.1	473.9	473.2	472.1	470.9	469.8	468.7	468.9
12.5°	469.8	469.5	469.3	469.0	468.7	467.7	466.2	464.7	463.1	461.6	461.8
15°	460.2	459.7	459.2	458.8	458.3	457.2	455.4	453.8	452.0	450.4	450.3
17.5°	449.3	448.5	447.8	447.0	446.3	444.9	442.7	440.5	438.4	436.3	435.9
20°	440.8	440.0	439.2	438.4	437.5	435.9	433.2	430.6	428.0	425.4	425.0
22.5°	431.4	430.6	429.8	429.0	428.2	426.4	423.7	421.0	418.2	415.5	414.7
25°	417.4	416.1	414.9	413.7	412.5	410.4	407.3	404.3	401.3	398.3	397.3
27.5°	401.2	399.8	398.3	396.8	395.3	393.0	389.8	386.5	383.3	380.1	378.6
30°	389.5	388.0	386.4	384.9	383.3	380.9	377.5	374.1	370.7	367.2	365.4
32.5°	378.1	376.3	374.5	372.7	370.9	368.3	364.8	361.3	357.8	354.3	352.3
35°	359.5	357.6	355.6	353.6	351.7	348.9	345.2	341.6	337.9	334.3	331.9
37.5°	341.3	338.9	336.5	334.1	331.8	328.7	325.0	321.2	317.4	313.6	310.8
40°	328.4	326.0	323.5	321.1	318.6	315.4	311.6	307.7	303.7	299.8	296.8
42.5°	314.9	312.4	309.9	307.4	304.9	301.7	297.6	293.6	289.5	285.5	282.6
45°	294.4	292.0	289.6	287.2	284.9	281.5	277.0	272.6	268.1	263.6	260.3
47.5°	273.1	270.5	268.1	265.5	263.1	259.6	255.1	250.6	246.1	241.5	238.2
50°	259.6	256.9	254.2	251.5	248.8	245.2	240.5	235.9	231.2	226.6	223.2
52.5°	244.9	242.2	239.4	236.7	233.9	230.4	226.0	221.6	217.2	212.9	209.2
55°	223.3	220.7	218.1	215.6	212.9	209.4	204.8	200.2	195.7	191.1	187.4
57.5°	201.5	198.8	195.9	193.1	190.4	186.8	182.4	178.0	173.6	169.2	165.6
60°	187.4	184.6	181.7	178.9	176.0	172.5	168.0	163.7	159.2	154.9	151.3
62.5°	172.5	169.8	167.1	164.4	161.6	158.0	153.6	149.2	144.7	140.2	136.9
65°	151.2	148.5	145.7	142.9	140.1	136.6	132.3	128.0	123.7	119.4	116.1
67.5°	130.1	127.3	124.5	121.8	119.0	115.5	111.4	107.3	103.1	99.0	96.0
70°	115.7	113.0	110.2	107.4	104.6	101.2	97.1	93.1	89.0	84.9	82.4
72.5°	101.6	98.9	96.3	93.6	90.9	87.5	83.7	79.9	76.1	72.3	70.0
75°	80.6	78.1	75.7	73.2	70.8	67.9	64.4	61.0	57.6	54.2	52.4
77.5°	59.6	57.7	55.7	53.7	51.8	49.4	46.7	44.0	41.3	38.5	37.2
80°	47.6	45.6	43.7	41.7	39.8	37.7	35.4	33.1	30.8	28.5	27.8
82.5°	35.9	34.1	32.4	30.6	28.8	27.2	25.7	24.1	22.5	20.9	20.6
85°	20.1	18.7	17.2	15.8	14.3	13.3	12.9	12.5	12.1	11.7	11.6
87.5°	6.9	6.5	6.3	6.1	5.9	5.9	5.9	6.1	6.2	6.3	6.5
90°	0.6	1.3	2.5	3.7	5.0	6.2	6.8	8.1	8.6	9.9	10.5
92.5°	7.5	9.2	14.3	22.0	32.7	50.8	84.6	141.3	202.9	199.7	161.7
95°	20.4	21.1	26.0	32.8	46.4	74.3	140.6	276.9	447.8	548.8	537.0
97.5°	33.9	34.7	38.2	45.0	57.2	77.3	121.1	221.0	399.9	586.1	679.5
100°	43.3	44.6	47.1	53.9	65.7	84.2	120.2	200.7	356.8	559.4	714.2
102.5°	53.8	54.5	56.5	63.8	74.5	92.7	124.6	192.3	324.1	512.2	693.4
105°	70.0	70.0	73.1	79.3	89.2	106.5	133.8	188.9	292.4	449.1	626.9
107.5°	85.9	87.1	90.1	95.1	105.4	121.0	147.4	194.6	279.0	405.6	559.0
110°	97.3	98.5	100.9	106.5	115.8	131.9	157.3	200.1	275.0	385.2	520.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	108.6	109.9	111.9	117.4	126.7	142.4	166.8	207.0	275.0	373.4	491.5
115°	125.1	126.4	128.3	133.8	143.1	158.6	181.5	217.4	276.9	360.5	460.2
117.5°	140.0	141.9	143.9	149.4	159.9	174.9	196.6	229.3	281.0	354.2	441.5
120°	149.9	151.8	154.2	159.8	170.3	185.8	207.5	237.3	284.9	351.2	431.1
122.5°	160.3	161.7	163.7	169.2	180.8	196.2	217.9	246.1	288.4	348.7	422.2
125°	173.4	174.7	177.8	183.3	195.1	211.2	231.6	258.3	294.2	345.6	410.0
127.5°	183.7	185.6	189.6	196.6	209.1	225.2	244.9	269.4	300.8	344.1	398.9
130°	190.1	192.0	196.9	205.0	218.0	234.2	253.3	276.9	304.8	343.2	391.5
132.5°	195.1	197.5	203.4	212.5	225.9	242.1	261.3	283.3	309.2	343.2	385.6
135°	203.2	205.7	213.1	223.0	236.0	252.7	272.0	292.4	315.3	343.2	378.4
137.5°	213.3	215.2	222.1	232.0	244.8	262.0	279.5	299.0	320.8	343.9	372.2
140°	219.3	221.1	228.5	238.4	250.3	267.0	284.9	303.5	323.3	344.4	369.2
142.5°	226.2	227.6	234.5	244.4	255.7	271.4	288.4	306.0	324.8	344.9	366.7
145°	236.6	237.8	244.1	252.7	263.9	278.1	294.2	309.7	326.5	344.4	363.0
147.5°	247.5	248.3	253.6	261.7	271.3	283.8	297.9	312.0	327.0	342.8	359.1
150°	254.0	255.2	259.5	267.6	276.2	286.8	300.4	313.4	327.0	341.3	356.2
152.5°	260.9	261.7	265.5	272.5	280.7	290.3	302.9	314.4	326.5	339.3	352.7
155°	270.1	270.1	273.8	280.0	286.1	294.9	305.4	315.3	325.2	335.7	346.9
157.5°	278.2	278.1	281.1	286.4	291.8	298.4	307.4	315.9	323.6	332.0	341.4
160°	283.7	283.0	285.6	289.9	294.9	300.4	308.5	315.9	322.1	329.5	337.0
162.5°	288.1	287.6	290.0	293.8	297.8	302.4	309.4	315.4	320.6	326.5	333.0
165°	294.9	293.6	295.5	298.6	301.0	304.8	309.7	314.7	318.4	322.1	327.0
167.5°	299.3	298.7	299.8	301.5	303.2	305.6	309.7	313.1	314.9	317.7	321.2
170°	302.3	301.7	302.3	303.5	304.8	306.6	309.7	312.2	313.4	315.3	317.7
172.5°	304.3	303.2	303.7	305.0	305.7	306.6	309.2	311.2	311.4	312.3	314.3
175°	306.6	305.4	306.0	306.6	306.6	306.6	308.5	309.7	309.1	309.1	309.7
177.5°	307.7	306.7	306.7	307.2	306.7	306.7	307.7	308.2	307.2	307.2	307.7
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	483.1	483.8	484.4	484.7	484.7	484.6	484.5	484.4
5°	480.1	480.9	481.7	482.1	482.0	481.7	481.6	481.4
7.5°	474.1	474.8	475.3	475.5	475.3	475.2	475.0	474.8
10°	469.1	469.4	469.6	469.6	469.4	469.1	468.9	468.7
12.5°	461.9	462.2	462.3	462.2	461.8	461.4	461.1	460.7
15°	450.1	450.0	450.0	449.6	448.9	448.1	447.4	446.6
17.5°	435.5	435.1	434.7	434.1	433.6	432.9	432.3	431.7
20°	424.6	424.2	423.8	423.3	422.5	421.8	421.0	420.3
22.5°	413.8	413.0	412.3	411.5	411.0	410.4	409.8	409.2
25°	396.2	395.1	394.1	393.2	392.2	391.3	390.5	389.5
27.5°	377.2	375.7	374.1	373.0	372.2	371.3	370.4	369.6
30°	363.5	361.6	359.7	358.5	357.7	357.0	356.2	355.5
32.5°	350.2	348.2	346.0	344.6	343.6	342.7	341.7	340.9
35°	329.5	327.2	324.8	323.1	321.9	320.8	319.6	318.5
37.5°	307.9	305.1	302.3	300.3	299.2	298.1	297.0	295.9
40°	293.7	290.6	287.5	285.4	284.5	283.5	282.5	281.5
42.5°	279.6	276.6	273.6	271.5	270.1	268.5	267.1	265.7
45°	257.1	253.8	250.6	248.3	247.2	245.9	244.7	243.4
47.5°	234.9	231.5	228.1	225.8	224.4	223.1	221.7	220.4
50°	219.8	216.3	212.9	210.6	209.5	208.2	207.0	205.7
52.5°	205.5	201.8	198.1	195.7	194.5	193.3	192.0	190.8
55°	183.8	180.1	176.5	174.0	172.7	171.3	170.1	168.8
57.5°	162.1	158.5	154.9	152.5	151.4	150.2	149.1	147.9
60°	147.7	144.1	140.5	138.2	136.9	135.7	134.5	133.2
62.5°	133.6	130.2	126.9	124.7	123.4	122.2	121.0	119.8
65°	112.8	109.6	106.3	104.1	102.9	101.6	100.4	99.2
67.5°	93.0	90.1	87.1	85.1	84.1	83.2	82.1	81.2
70°	79.9	77.4	74.9	73.1	72.1	71.1	70.2	69.2
72.5°	67.7	65.4	63.1	61.6	60.9	60.3	59.6	58.9
75°	50.6	48.8	47.1	45.9	45.3	44.7	44.1	43.6
77.5°	36.0	34.8	33.5	32.6	32.2	31.8	31.4	31.0
80°	27.1	26.4	25.7	25.2	25.0	24.9	24.7	24.6
82.5°	20.3	19.9	19.6	19.3	19.3	19.2	19.1	18.9
85°	11.6	11.5	11.4	11.3	11.2	11.2	11.1	11.0
87.5°	6.7	6.7	6.9	7.1	7.1	7.0	7.1	7.0
90°	11.2	11.8	12.4	13.6	13.6	13.6	14.3	14.3
92.5°	109.8	79.7	60.0	50.8	42.9	41.4	40.5	39.5
95°	445.4	351.2	275.0	223.0	179.0	160.4	155.5	145.5
97.5°	663.3	597.2	523.0	450.7	412.4	377.7	359.7	351.8
100°	761.8	731.5	667.7	603.3	560.5	515.9	493.1	483.2
102.5°	795.0	813.8	783.2	739.6	693.9	662.1	637.2	629.8
105°	775.5	860.4	887.6	880.8	860.9	840.5	828.1	820.7
107.5°	705.6	818.9	888.8	921.1	931.2	931.1	927.0	922.0
110°	654.1	771.7	859.1	911.7	939.6	951.4	955.8	955.8





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CATALOG NUMBER: S125RDIP-S375D810U927-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	613.5	725.2	813.5	875.6	916.3	936.5	947.3	951.8
115°	562.4	658.5	743.3	810.8	859.1	888.8	906.2	914.3
117.5°	529.5	612.2	685.3	747.3	795.6	826.2	843.5	848.4
120°	511.6	586.0	654.1	708.6	754.4	784.2	800.9	805.8
122.5°	498.3	567.1	627.8	678.9	719.8	747.0	763.7	768.2
125°	478.8	542.0	595.9	640.5	675.2	700.5	714.2	720.3
127.5°	459.0	517.9	568.2	610.0	641.4	663.8	676.8	679.5
130°	446.6	501.1	549.4	589.7	620.7	641.1	653.5	657.2
132.5°	434.2	485.2	529.1	567.8	598.8	619.2	630.7	634.9
135°	418.1	460.8	500.5	535.8	563.0	583.4	594.6	598.3
137.5°	404.5	439.0	472.0	501.9	526.4	544.9	555.2	559.4
140°	397.0	426.1	454.6	480.6	503.6	519.7	528.9	532.0
142.5°	390.6	415.3	439.7	462.3	481.8	495.4	504.2	506.8
145°	382.1	401.4	420.6	437.3	452.2	462.7	469.5	472.0
147.5°	374.2	389.8	404.6	417.2	429.0	437.4	441.4	442.5
150°	369.8	383.4	395.1	406.3	415.7	423.0	425.6	426.1
152.5°	364.8	377.0	387.8	396.4	404.3	410.2	412.6	413.3
155°	357.4	367.3	376.0	382.8	389.0	393.3	395.1	395.8
157.5°	350.0	358.1	364.8	370.2	375.0	378.6	380.3	380.2
160°	345.0	351.2	357.4	361.7	366.1	369.2	370.4	369.8
162.5°	339.5	345.2	350.5	354.3	357.7	360.2	360.5	360.4
165°	332.0	336.4	340.1	343.2	345.6	346.9	346.9	346.9
167.5°	324.8	327.6	330.5	332.7	334.0	335.1	334.6	334.5
170°	320.8	322.7	324.6	325.8	327.0	327.6	327.6	327.0
172.5°	316.4	318.2	319.6	320.4	320.6	321.7	320.8	320.1
175°	311.6	311.6	312.8	312.8	312.8	313.4	312.2	311.6
177.5°	308.2	308.7	308.7	308.7	308.2	308.7	307.2	307.2
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2

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