

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: P333348-840

Luminaire Tested: **S125DIW-S375D770U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333348-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIW-S375D770U840-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 770 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4576.3 lumens  
Efficiency: N/A  
Efficacy: 150.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

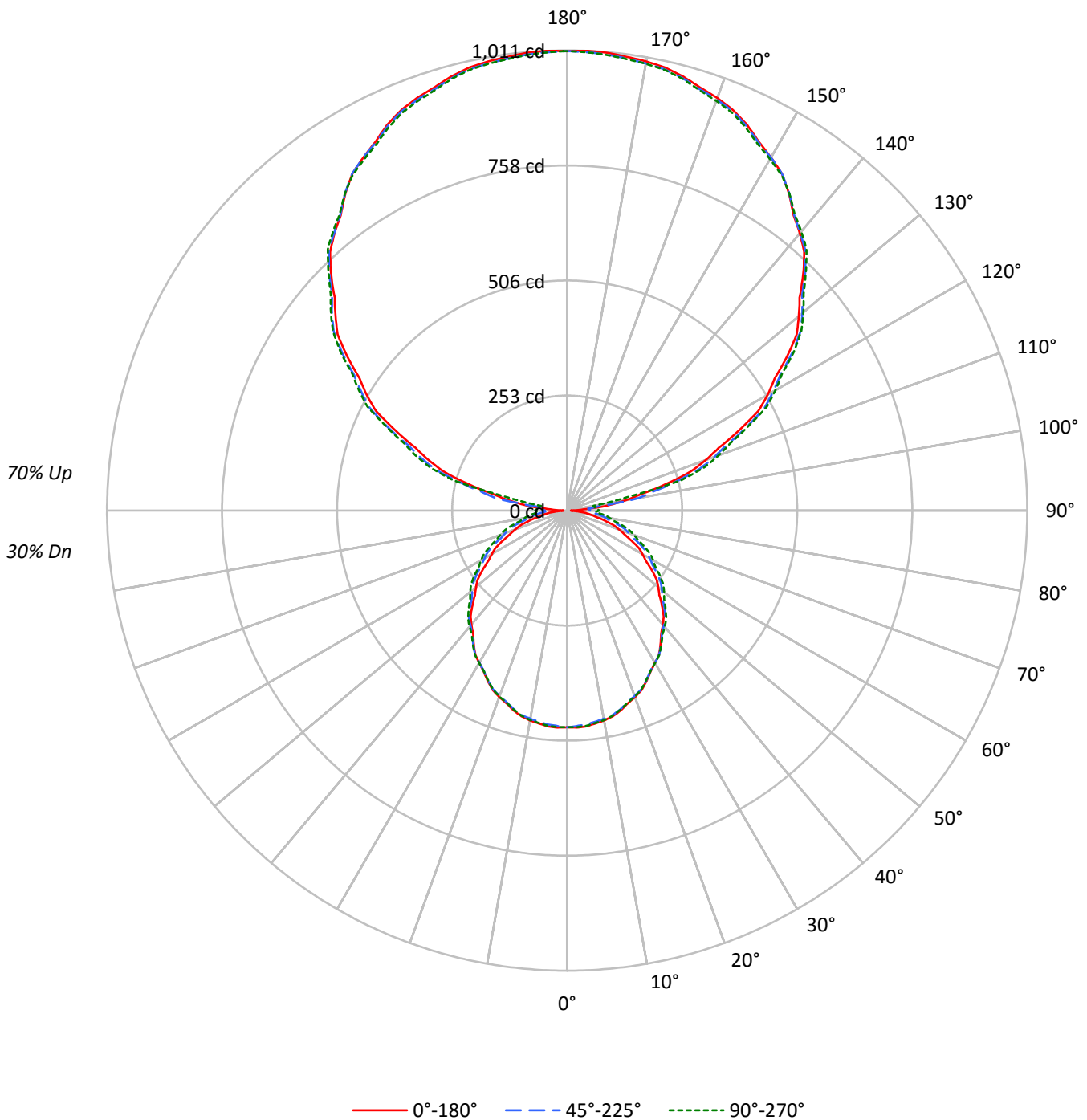
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P333348-840

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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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	93	89	85	81	83	80	76	73	63	60	58	47	46	44	33	32	31	25
2	84	77	71	66	75	69	64	60	55	51	48	41	39	37	29	27	26	20
3	77	67	60	54	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	46	63	54	47	42	42	38	34	32	29	26	22	20	19	14
5	64	53	45	39	57	48	41	36	38	33	29	29	25	22	20	18	16	12
6	59	47	39	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	54	42	35	29	49	38	32	27	31	26	22	23	20	17	17	14	12	10
8	50	38	31	26	45	35	28	24	28	23	19	21	18	15	15	13	11	9
9	47	35	28	23	42	32	25	21	25	21	17	20	16	14	14	12	10	8
10	44	32	25	20	39	29	23	19	23	19	15	18	15	12	13	11	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.0	1.0
10°-20°	127.8	2.8
20°-30°	190.0	4.2
30°-40°	225.1	4.9
40°-50°	232.7	5.1
50°-60°	214.4	4.7
60°-70°	173.3	3.8
70°-80°	116.1	2.5
80°-90°	62.3	1.4
90°-100°	70.5	1.5
100°-110°	251.0	5.5
110°-120°	426.7	9.3
120°-130°	535.7	11.7
130°-140°	570.1	12.5
140°-150°	532.1	11.6
150°-160°	429.7	9.4
160°-170°	277.9	6.1
170°-180°	95.9	2.1
0°-30°	362.8	7.9
0°-40°	587.9	12.8
0°-60°	1035.1	22.6
0°-90°	1386.7	30.3
90°-120°	748.1	16.3
90°-150°	2386.0	52.1
90°-180°	3190.0	69.7
0°-180°	4576.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	29	50	64	70	7
95°	49	57	46	59	63	59
105°	224	235	249	258	260	238
115°	416	423	436	441	440	412
125°	589	594	603	608	608	526
135°	734	737	739	744	742	565
145°	850	851	851	854	851	531
155°	935	931	932	934	929	431
165°	987	983	983	987	982	279
175°	1010	1005	1006	1011	1005	96
180°	1010	1010	1010	1010	1010	



TEST NUMBER: P333348-840

CATALOG NUMBER: S125DIW-S375D770U840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.7	18.3	21.9	25.4	29.1	32.7	36.5	40.2	44.0	47.8	50.3
90°	8.2	12.8	17.5	22.1	26.9	31.5	36.2	40.9	45.5	50.3	53.4
92.5°	18.3	20.4	22.5	24.6	26.8	30.2	34.8	39.5	44.1	48.8	51.9
95°	48.7	50.9	53.1	55.3	57.5	57.3	54.4	51.6	48.9	46.0	49.2
97.5°	94.5	97.9	101.2	104.5	107.9	104.9	95.8	86.7	77.7	68.6	66.0
100°	130.1	132.8	135.4	138.1	140.8	144.1	148.1	152.1	156.1	160.1	137.4
102.5°	166.2	168.8	171.6	174.2	176.8	180.0	183.6	187.2	190.9	194.5	191.9
105°	224.2	226.5	228.8	231.2	233.5	236.2	239.3	242.5	245.5	248.6	250.7
107.5°	284.4	285.8	287.2	288.6	290.0	292.4	295.7	299.0	302.4	305.7	307.8
110°	323.6	324.8	326.0	327.3	328.5	330.7	334.0	337.2	340.4	343.7	345.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	360.6	362.0	363.5	364.9	366.2	368.4	371.4	374.5	377.5	380.5	381.7
115°	415.9	417.4	419.0	420.5	422.1	424.2	427.2	430.0	432.8	435.8	437.0
117.5°	473.0	473.4	473.9	474.3	474.7	476.6	479.8	482.9	486.1	489.3	490.2
120°	508.9	509.1	509.2	509.4	509.5	511.0	513.9	516.7	519.7	522.5	524.0
122.5°	540.3	541.1	541.8	542.6	543.4	545.0	547.5	550.1	552.6	555.2	556.5
125°	589.3	590.4	591.4	592.5	593.5	595.1	597.1	599.3	601.3	603.4	604.4
127.5°	635.6	636.3	637.1	637.8	638.5	639.7	641.3	642.9	644.5	646.1	647.3
130°	664.4	665.1	665.8	666.5	667.3	668.4	670.0	671.7	673.3	674.9	675.9
132.5°	692.8	693.7	694.6	695.6	696.5	697.3	698.1	698.8	699.6	700.3	701.8
135°	733.5	734.4	735.3	736.2	737.1	737.7	738.1	738.5	738.9	739.3	740.3
137.5°	770.9	771.7	772.5	773.4	774.1	774.5	774.6	774.6	774.7	774.8	776.0
140°	795.2	795.5	795.8	796.2	796.5	796.6	796.6	796.5	796.4	796.4	797.8
142.5°	817.3	817.4	817.5	817.6	817.8	817.9	818.2	818.4	818.7	818.9	820.0
145°	849.8	850.0	850.2	850.4	850.7	850.8	850.8	850.8	850.8	850.8	851.5
147.5°	877.8	877.7	877.6	877.6	877.5	877.6	877.8	877.9	878.1	878.3	878.7
150°	895.6	895.3	895.0	894.6	894.3	894.3	894.6	895.0	895.3	895.6	896.1
152.5°	913.0	912.3	911.6	910.9	910.1	909.9	910.3	910.6	910.9	911.2	911.6
155°	935.3	934.3	933.3	932.3	931.4	931.0	931.4	931.7	932.0	932.3	932.8
157.5°	952.5	952.0	951.4	950.8	950.2	949.9	949.9	950.0	950.0	950.0	950.6
160°	964.5	963.5	962.5	961.5	960.6	960.1	960.3	960.5	960.6	960.8	961.5
162.5°	974.1	973.1	972.1	971.1	970.1	969.7	969.9	970.1	970.2	970.4	971.3
165°	986.9	985.9	985.0	984.0	983.0	982.6	982.7	982.9	983.1	983.2	984.2
167.5°	996.5	995.5	994.5	993.5	992.4	992.0	992.2	992.3	992.5	992.7	993.8
170°	1002.0	1000.8	999.6	998.5	997.2	996.7	996.9	997.1	997.2	997.4	998.8
172.5°	1005.5	1004.4	1003.2	1002.0	1000.9	1000.5	1000.8	1001.1	1001.4	1001.7	1002.8
175°	1009.5	1008.5	1007.4	1006.4	1005.4	1005.0	1005.2	1005.3	1005.5	1005.7	1007.0
177.5°	1011.2	1010.4	1009.7	1008.9	1008.0	1007.6	1007.8	1007.9	1008.0	1008.2	1009.2
180°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	52.8	55.4	58.0	59.7	60.5	61.3	62.1	62.9
90°	56.7	59.9	63.1	65.3	66.6	67.8	69.0	70.2
92.5°	55.0	58.2	61.3	63.3	64.3	65.2	66.2	67.2
95°	52.3	55.3	58.5	60.4	61.1	61.9	62.6	63.3
97.5°	63.5	61.0	58.5	57.6	58.3	59.0	59.7	60.4
100°	114.9	92.3	69.7	58.4	58.3	58.3	58.3	58.2
102.5°	189.3	186.7	184.1	177.4	166.8	156.1	145.4	134.7
105°	252.8	254.9	256.9	258.2	258.8	259.4	259.9	260.5
107.5°	309.8	311.9	314.1	315.2	315.3	315.4	315.6	315.7
110°	346.7	348.1	349.6	350.7	351.6	352.5	353.5	354.4





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CATALOG NUMBER: S125DIW-S375D770U840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	383.0	384.3	385.6	386.4	386.9	387.4	387.9	388.4
115°	438.2	439.4	440.5	441.0	440.6	440.2	439.8	439.5
117.5°	491.1	492.0	492.9	493.5	493.7	494.0	494.3	494.6
120°	525.4	526.8	528.3	528.9	528.7	528.5	528.3	528.1
122.5°	557.8	559.3	560.6	561.1	560.7	560.4	560.1	559.7
125°	605.3	606.3	607.3	607.8	607.8	607.9	607.9	607.9
127.5°	648.4	649.6	650.8	651.1	650.5	649.8	649.1	648.5
130°	676.8	677.8	678.7	679.0	678.7	678.4	678.1	677.8
132.5°	703.1	704.4	705.8	706.3	705.9	705.5	705.1	704.7
135°	741.3	742.4	743.4	743.7	743.2	742.7	742.1	741.7
137.5°	777.3	778.6	779.9	780.3	779.8	779.4	778.9	778.5
140°	799.3	800.7	802.2	802.6	802.1	801.5	800.9	800.3
142.5°	821.0	822.0	823.1	823.3	822.7	822.1	821.6	821.0
145°	852.1	852.8	853.5	853.5	853.0	852.4	851.8	851.2
147.5°	879.1	879.4	879.8	879.5	878.5	877.5	876.5	875.5
150°	896.4	896.7	897.1	896.6	895.3	894.1	892.9	891.7
152.5°	911.9	912.2	912.6	912.1	911.0	909.8	908.7	907.5
155°	933.3	933.8	934.3	933.9	932.6	931.3	930.0	928.6
157.5°	951.1	951.6	952.1	951.7	950.4	949.1	947.8	946.4
160°	962.1	962.8	963.4	963.1	961.8	960.5	959.2	957.8
162.5°	972.2	973.1	974.1	973.8	972.4	970.9	969.5	968.0
165°	985.2	986.2	987.2	987.0	985.7	984.4	983.1	981.7
167.5°	995.0	996.2	997.4	997.3	995.8	994.3	992.8	991.3
170°	1000.1	1001.5	1002.8	1002.7	1001.2	999.7	998.2	996.7
172.5°	1004.0	1005.2	1006.4	1006.2	1004.8	1003.3	1001.8	1000.3
175°	1008.4	1009.7	1011.0	1010.9	1009.5	1007.9	1006.4	1004.9
177.5°	1010.1	1011.0	1012.0	1011.9	1010.8	1009.8	1008.7	1007.6
180°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5

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