

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: P333357-927

Luminaire Tested: **S125DIW-S375D1050U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333357-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIW-S375D1050U927-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4084.7 lumens  
Efficiency: N/A  
Efficacy: 107.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

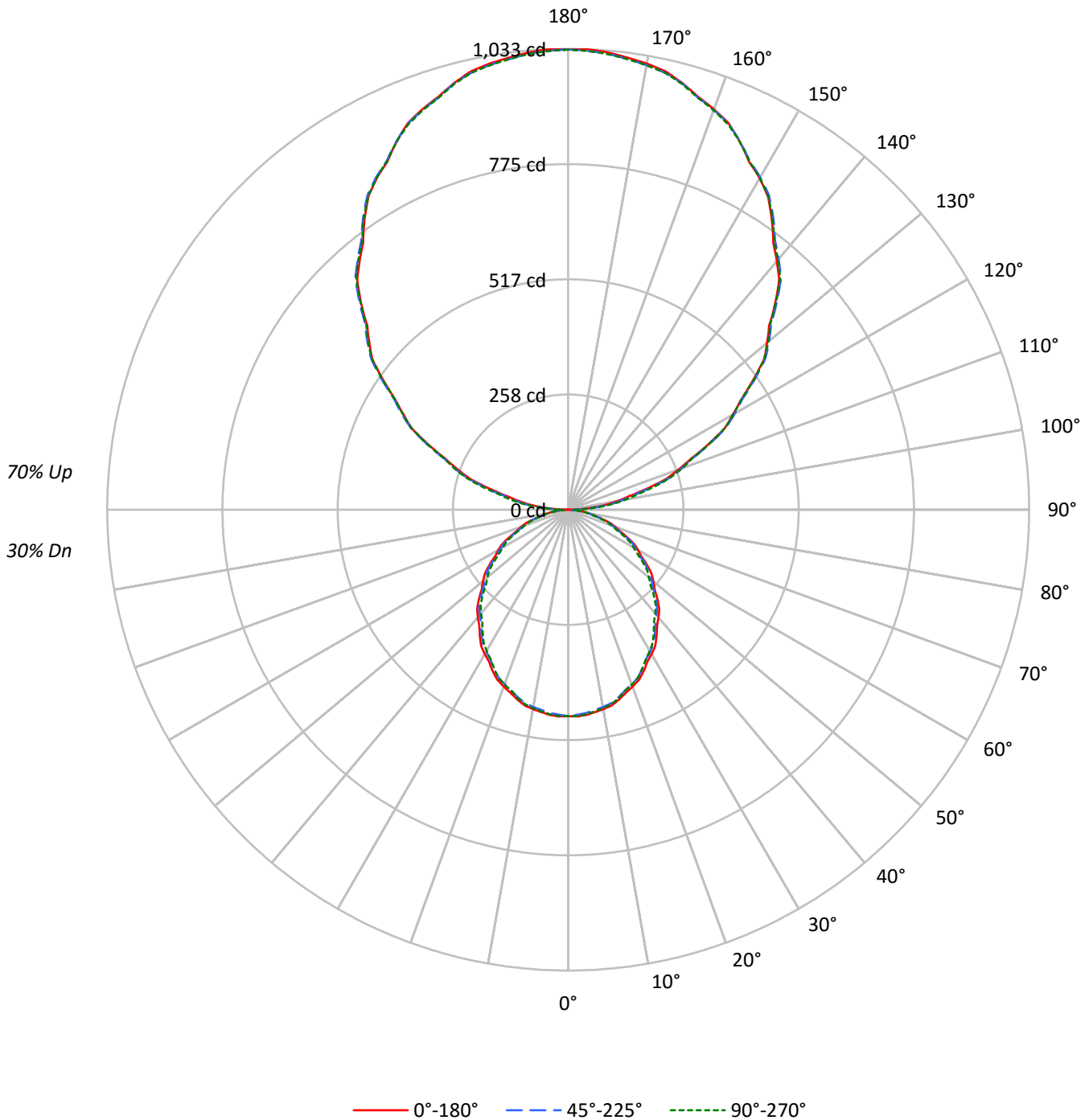
Input Watts (W): 38  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20			20			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	37	37	37	30
1	93	89	85	82	83	80	77	74	63	61	59	47	46	45	33	32	31	25
2	85	78	72	67	76	70	65	60	55	52	49	41	39	37	29	28	26	21
3	77	68	61	55	69	61	55	50	48	44	41	37	34	31	26	24	22	18
4	71	60	53	47	63	54	48	43	43	38	35	33	29	27	23	21	19	15
5	65	53	46	40	58	48	41	36	38	33	30	29	26	23	21	18	17	13
6	59	48	40	34	53	43	36	31	34	29	26	26	23	20	19	16	15	11
7	55	43	35	30	49	39	32	27	31	26	23	24	20	18	17	15	13	10
8	51	39	31	26	45	35	29	24	28	23	20	22	18	16	16	13	12	9
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	14	12	10	8
10	44	32	25	21	39	29	23	19	24	19	16	18	15	13	13	11	9	7

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

	0°	45°	90°
0°	2989	2989	2989
5°	2995	2967	2986
10°	2977	2946	2963
15°	2945	2910	2923
20°	2899	2861	2866
25°	2849	2802	2799
30°	2788	2738	2725
35°	2722	2670	2633
40°	2655	2596	2559
45°	2582	2528	2478
50°	2502	2446	2372
55°	2423	2354	2288
60°	2331	2260	2180
65°	2222	2149	2077
70°	2115	2019	1949
75°	1926	1864	1799
80°	1715	1689	1648
85°	1489	1519	1438



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.6	1.1
10°-20°	123.3	3.0
20°-30°	182.0	4.5
30°-40°	212.4	5.2
40°-50°	213.3	5.2
50°-60°	187.2	4.6
60°-70°	139.5	3.4
70°-80°	79.8	2.0
80°-90°	25.5	0.6
90°-100°	69.1	1.7
100°-110°	204.0	5.0
110°-120°	345.5	8.5
120°-130°	454.7	11.1
130°-140°	509.6	12.5
140°-150°	499.4	12.2
150°-160°	419.5	10.3
160°-170°	278.8	6.8
170°-180°	97.6	2.4
0°-30°	348.9	8.5
0°-40°	561.2	13.7
0°-60°	961.7	23.5
0°-90°	1206.4	29.5
90°-120°	618.6	15.1
90°-150°	2082.3	51.0
90°-180°	2878.0	70.5
0°-180°	4084.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	462	461	458	461	461	44
15°	440	439	435	437	437	124
25°	400	398	393	394	393	184
35°	345	344	339	337	334	216
45°	283	281	277	273	271	218
55°	215	214	209	206	203	192
65°	145	144	141	137	136	144
75°	77	76	75	74	72	82
85°	20	20	20	20	19	23
90°	1	7	13	17	19	4
95°	52	54	62	67	69	56
105°	183	187	192	196	199	195
115°	346	349	351	350	349	342
125°	505	509	510	509	508	452
135°	657	661	662	662	659	506
145°	795	799	801	801	799	497
155°	910	910	911	914	910	419
165°	990	988	989	992	987	279
175°	1029	1026	1026	1030	1025	98
180°	1031	1031	1031	1031	1031	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	463.9	463.7	463.6	463.3	463.2	462.7	462.1	461.4	460.8	460.1	460.8
5°	462.0	461.8	461.7	461.5	461.4	460.9	460.1	459.3	458.4	457.6	458.4
7.5°	457.8	457.6	457.5	457.3	457.2	456.6	455.7	454.8	453.9	453.0	453.8
10°	454.0	453.8	453.7	453.5	453.4	452.8	451.9	451.0	450.1	449.2	449.9
12.5°	449.3	449.0	448.7	448.5	448.1	447.6	446.7	445.9	445.0	444.3	444.7
15°	440.5	440.2	440.0	439.7	439.4	438.9	438.0	437.1	436.2	435.3	435.7
17.5°	430.2	429.9	429.5	429.2	428.8	428.2	427.2	426.4	425.4	424.5	425.0
20°	421.8	421.6	421.4	421.3	421.1	420.5	419.5	418.4	417.3	416.3	416.8
22.5°	413.3	413.0	412.6	412.4	412.1	411.5	410.4	409.5	408.4	407.5	407.9
25°	399.8	399.4	398.9	398.5	398.2	397.4	396.4	395.3	394.3	393.2	393.4
27.5°	384.0	383.8	383.6	383.3	383.1	382.4	381.4	380.2	379.1	378.0	378.1
30°	373.8	373.6	373.3	373.0	372.8	372.1	370.9	369.6	368.4	367.2	367.0
32.5°	362.7	362.3	361.9	361.6	361.2	360.4	359.3	358.2	357.2	356.1	355.8
35°	345.2	344.9	344.6	344.3	344.0	343.2	342.1	341.0	339.8	338.7	338.3
37.5°	327.2	326.8	326.4	325.9	325.5	324.8	323.7	322.7	321.5	320.5	319.9
40°	314.9	314.4	314.0	313.6	313.2	312.4	311.3	310.2	309.0	307.9	307.2
42.5°	301.7	301.3	301.0	300.6	300.3	299.6	298.4	297.3	296.1	295.0	294.4
45°	282.7	282.3	282.0	281.7	281.3	280.7	279.7	278.8	277.7	276.8	275.8
47.5°	262.1	262.1	262.1	262.2	262.2	261.7	260.5	259.3	258.1	256.9	256.0
50°	249.0	248.7	248.5	248.2	248.0	247.4	246.4	245.4	244.5	243.4	242.4
52.5°	235.5	235.3	235.1	235.0	234.8	234.2	233.1	232.1	231.0	230.0	229.1
55°	215.2	215.0	214.8	214.5	214.3	213.6	212.5	211.4	210.2	209.1	208.3
57.5°	194.0	193.8	193.7	193.6	193.5	192.9	191.9	191.0	190.0	189.1	188.1
60°	180.5	180.1	179.8	179.5	179.2	178.6	177.7	176.8	175.9	175.0	174.2
62.5°	166.4	166.2	165.9	165.6	165.4	164.9	164.1	163.3	162.6	161.8	161.0
65°	145.4	145.2	145.0	144.9	144.7	144.2	143.3	142.4	141.5	140.6	139.8
67.5°	124.9	124.6	124.2	123.9	123.6	123.0	122.4	121.7	121.0	120.4	119.8
70°	112.0	111.6	111.2	110.8	110.4	109.8	109.1	108.4	107.7	106.9	106.4
72.5°	98.0	97.7	97.4	97.1	96.9	96.5	96.0	95.5	95.1	94.6	94.0
75°	77.2	77.1	76.9	76.8	76.6	76.3	75.9	75.5	75.1	74.7	74.5
77.5°	58.1	58.1	58.0	57.9	57.9	57.8	57.5	57.3	57.0	56.8	56.6
80°	46.1	46.1	46.1	46.1	46.1	46.0	45.9	45.7	45.6	45.4	45.3
82.5°	35.6	35.5	35.3	35.2	35.1	35.0	34.9	34.9	34.9	34.9	34.7
85°	20.1	20.2	20.3	20.4	20.4	20.5	20.5	20.5	20.5	20.5	20.4
87.5°	8.1	8.3	8.6	9.0	9.2	9.4	9.7	9.8	10.0	10.2	10.4
90°	0.8	2.2	3.6	5.1	6.5	7.8	9.1	10.4	11.6	12.8	13.7
92.5°	19.4	20.4	21.4	22.4	23.4	24.7	26.2	27.7	29.3	30.8	32.0
95°	52.2	52.5	52.9	53.2	53.6	54.7	56.5	58.2	60.0	61.8	63.1
97.5°	86.7	86.8	87.0	87.1	87.3	88.6	91.0	93.5	95.9	98.4	99.6
100°	112.4	112.4	112.4	112.4	112.4	113.5	115.8	118.2	120.5	122.8	124.5
102.5°	140.0	140.7	141.4	142.1	142.8	143.8	145.0	146.2	147.3	148.5	150.3
105°	183.0	183.9	184.8	185.7	186.6	187.6	188.6	189.7	190.8	191.9	192.9
107.5°	230.5	231.4	232.3	233.2	234.1	235.0	235.8	236.6	237.4	238.2	238.8
110°	263.2	264.2	265.1	265.9	266.9	267.6	268.1	268.6	269.2	269.7	270.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	296.7	297.1	297.6	298.1	298.5	299.1	299.8	300.5	301.1	301.8	302.1
115°	345.9	346.7	347.4	348.1	348.8	349.4	349.7	350.1	350.4	350.8	350.6
117.5°	395.4	395.7	396.0	396.3	396.7	397.0	397.4	397.7	398.0	398.3	398.5
120°	426.2	427.1	428.0	428.9	429.8	430.3	430.5	430.7	430.9	431.0	431.0
122.5°	459.6	459.9	460.3	460.6	460.9	461.3	461.8	462.2	462.7	463.2	463.0
125°	504.9	506.0	507.0	508.1	509.1	509.8	510.0	510.2	510.3	510.5	510.2
127.5°	553.0	553.7	554.3	554.8	555.5	555.9	556.1	556.3	556.5	556.7	556.6
130°	581.9	582.8	583.8	584.6	585.5	586.1	586.5	586.8	587.2	587.6	587.4
132.5°	610.9	612.3	613.8	615.2	616.7	617.4	617.3	617.3	617.2	617.1	617.0
135°	656.6	657.7	658.7	659.8	660.9	661.5	661.7	661.9	662.0	662.2	662.2
137.5°	699.7	700.7	701.7	702.7	703.8	704.5	704.9	705.3	705.7	706.1	706.2
140°	727.2	728.1	729.0	729.9	730.8	731.5	732.1	732.6	733.1	733.6	734.0
142.5°	754.9	755.6	756.4	757.1	757.9	758.6	759.2	759.9	760.6	761.3	761.4
145°	795.4	796.1	796.9	797.6	798.3	798.9	799.5	800.0	800.6	801.1	801.1
147.5°	833.1	833.5	833.9	834.2	834.6	835.0	835.4	835.8	836.3	836.7	837.2
150°	858.1	857.9	857.7	857.5	857.4	857.6	858.3	859.0	859.8	860.5	860.5
152.5°	878.6	878.8	879.1	879.4	879.6	879.9	880.2	880.4	880.7	881.1	881.5
155°	910.2	910.2	910.2	910.2	910.2	910.3	910.5	910.7	910.9	911.1	911.8
157.5°	938.5	938.1	937.7	937.3	936.9	936.8	937.0	937.2	937.4	937.5	938.3
160°	955.2	954.7	954.1	953.6	953.1	952.9	953.1	953.2	953.4	953.6	954.3
162.5°	969.9	969.6	969.2	968.8	968.4	968.2	968.3	968.3	968.4	968.4	969.2
165°	989.8	989.4	989.0	988.6	988.2	988.2	988.4	988.6	988.7	988.9	989.6
167.5°	1006.4	1005.7	1005.0	1004.2	1003.5	1003.2	1003.2	1003.2	1003.2	1003.2	1004.2
170°	1015.4	1014.7	1014.0	1013.3	1012.6	1012.2	1012.2	1012.2	1012.2	1012.2	1013.3
172.5°	1021.8	1021.1	1020.4	1019.7	1019.0	1018.6	1018.6	1018.6	1018.6	1018.6	1019.7
175°	1029.0	1028.3	1027.6	1026.9	1026.2	1025.8	1025.8	1025.8	1025.8	1025.8	1026.9
177.5°	1032.8	1032.1	1031.6	1031.0	1030.5	1030.1	1029.9	1029.8	1029.7	1029.5	1030.4
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	461.4	462.1	462.7	463.0	463.0	462.9	462.9	462.8
5°	459.1	459.9	460.6	460.9	460.8	460.7	460.7	460.6
7.5°	454.5	455.2	455.9	456.2	456.1	456.1	456.0	455.9
10°	450.5	451.1	451.9	452.1	452.0	451.9	451.9	451.8
12.5°	445.3	445.8	446.3	446.6	446.6	446.6	446.6	446.5
15°	436.1	436.5	437.0	437.1	437.1	437.1	437.1	437.1
17.5°	425.5	426.0	426.5	426.5	426.1	425.7	425.3	424.9
20°	417.4	418.0	418.5	418.7	418.2	417.8	417.4	417.0
22.5°	408.2	408.6	409.0	409.0	408.8	408.4	408.2	407.9
25°	393.6	393.7	393.9	393.8	393.6	393.3	393.1	392.8
27.5°	378.1	378.1	378.2	378.1	377.8	377.6	377.3	377.1
30°	366.9	366.7	366.5	366.4	366.1	365.9	365.6	365.4
32.5°	355.5	355.2	354.9	354.6	354.1	353.6	353.2	352.8
35°	337.9	337.5	337.0	336.5	335.9	335.2	334.5	333.9
37.5°	319.3	318.7	318.1	317.6	317.2	316.9	316.5	316.1
40°	306.4	305.7	305.0	304.5	304.3	304.0	303.7	303.5
42.5°	293.7	293.0	292.3	291.8	291.4	291.0	290.7	290.3
45°	274.8	273.9	272.9	272.3	272.0	271.8	271.6	271.3
47.5°	254.9	254.0	252.9	252.2	251.6	251.0	250.5	249.9
50°	241.4	240.3	239.2	238.4	237.8	237.3	236.7	236.1
52.5°	228.1	227.2	226.2	225.5	224.9	224.3	223.6	223.0
55°	207.6	206.8	206.1	205.5	204.9	204.3	203.7	203.2
57.5°	187.2	186.2	185.3	184.7	184.3	184.0	183.7	183.4
60°	173.4	172.5	171.7	171.0	170.5	169.9	169.4	168.8
62.5°	160.1	159.1	158.3	157.6	157.2	156.8	156.3	155.9
65°	139.1	138.4	137.7	137.1	136.8	136.5	136.2	135.9
67.5°	119.1	118.5	117.9	117.5	117.3	117.1	116.9	116.7
70°	105.9	105.4	105.0	104.6	104.3	103.9	103.5	103.2
72.5°	93.5	92.9	92.4	92.0	91.7	91.3	90.9	90.6
75°	74.2	74.0	73.7	73.4	73.1	72.8	72.5	72.1
77.5°	56.6	56.4	56.2	56.1	55.8	55.6	55.4	55.1
80°	45.2	45.2	45.1	44.9	44.8	44.6	44.4	44.3
82.5°	34.5	34.4	34.3	34.1	34.1	34.1	34.1	34.1
85°	20.4	20.3	20.2	20.0	19.9	19.7	19.6	19.4
87.5°	10.5	10.7	10.9	11.0	10.9	10.9	10.9	10.9
90°	14.7	15.5	16.4	17.1	17.7	18.2	18.7	19.3
92.5°	33.2	34.4	35.6	36.3	36.7	37.1	37.5	37.9
95°	64.3	65.5	66.8	67.6	68.0	68.3	68.7	69.0
97.5°	100.8	102.0	103.1	103.8	104.0	104.3	104.5	104.6
100°	126.0	127.6	129.2	130.2	130.6	130.9	131.3	131.7
102.5°	152.0	153.8	155.5	156.6	157.1	157.6	158.1	158.6
105°	194.0	195.0	196.1	196.9	197.5	198.0	198.5	199.1
107.5°	239.3	239.9	240.3	240.7	240.6	240.6	240.5	240.5
110°	270.8	271.3	271.9	272.0	271.9	271.6	271.5	271.3





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CATALOG NUMBER: S125DIW-S375D1050U927-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	302.3	302.5	302.8	302.8	302.5	302.1	301.8	301.5
115°	350.4	350.2	350.1	349.9	349.7	349.5	349.4	349.2
117.5°	398.5	398.7	398.9	398.5	397.8	397.1	396.4	395.7
120°	431.0	431.0	431.0	430.7	430.0	429.3	428.6	427.9
122.5°	462.9	462.7	462.6	462.2	461.7	461.1	460.5	459.9
125°	509.8	509.5	509.1	508.8	508.7	508.4	508.3	508.1
127.5°	556.3	556.2	556.0	555.8	555.4	555.1	554.7	554.4
130°	587.2	587.0	586.8	586.6	586.2	585.9	585.5	585.2
132.5°	616.7	616.6	616.4	616.1	615.5	615.1	614.6	614.0
135°	662.2	662.2	662.2	661.9	661.2	660.4	659.7	659.0
137.5°	706.5	706.7	706.9	706.5	705.7	704.8	703.9	703.0
140°	734.4	734.7	735.1	734.8	734.0	733.0	732.1	731.3
142.5°	761.7	761.9	762.2	761.8	760.9	760.0	759.1	758.2
145°	801.1	801.1	801.1	800.8	800.3	799.7	799.2	798.7
147.5°	837.6	838.0	838.4	838.0	836.9	835.6	834.4	833.2
150°	860.5	860.5	860.5	860.3	859.9	859.6	859.2	858.9
152.5°	881.9	882.3	882.7	882.6	882.0	881.4	880.7	880.0
155°	912.5	913.2	913.9	913.8	912.9	912.0	911.2	910.2
157.5°	939.0	939.7	940.4	940.2	939.0	937.8	936.6	935.5
160°	955.1	955.8	956.5	956.3	955.5	954.6	953.7	952.8
162.5°	970.1	970.9	971.8	971.7	970.7	969.6	968.6	967.6
165°	990.3	991.0	991.7	991.6	990.5	989.4	988.4	987.3
167.5°	1005.4	1006.4	1007.5	1007.5	1006.4	1005.3	1004.2	1003.1
170°	1014.3	1015.4	1016.4	1016.4	1015.1	1013.9	1012.6	1011.4
172.5°	1020.7	1021.8	1022.9	1022.9	1021.8	1020.6	1019.5	1018.4
175°	1027.9	1029.0	1030.2	1030.0	1028.8	1027.5	1026.3	1025.0
177.5°	1031.3	1032.1	1032.9	1032.8	1031.9	1030.9	1029.9	1028.9
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4

(END OF REPORT)