

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: P333139-840

Luminaire Tested: **S125DIP-S375D810U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333139-840
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: S125DIP-S375D810U840-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4809.0 lumens
Efficiency: N/A
Efficacy: 154.1 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

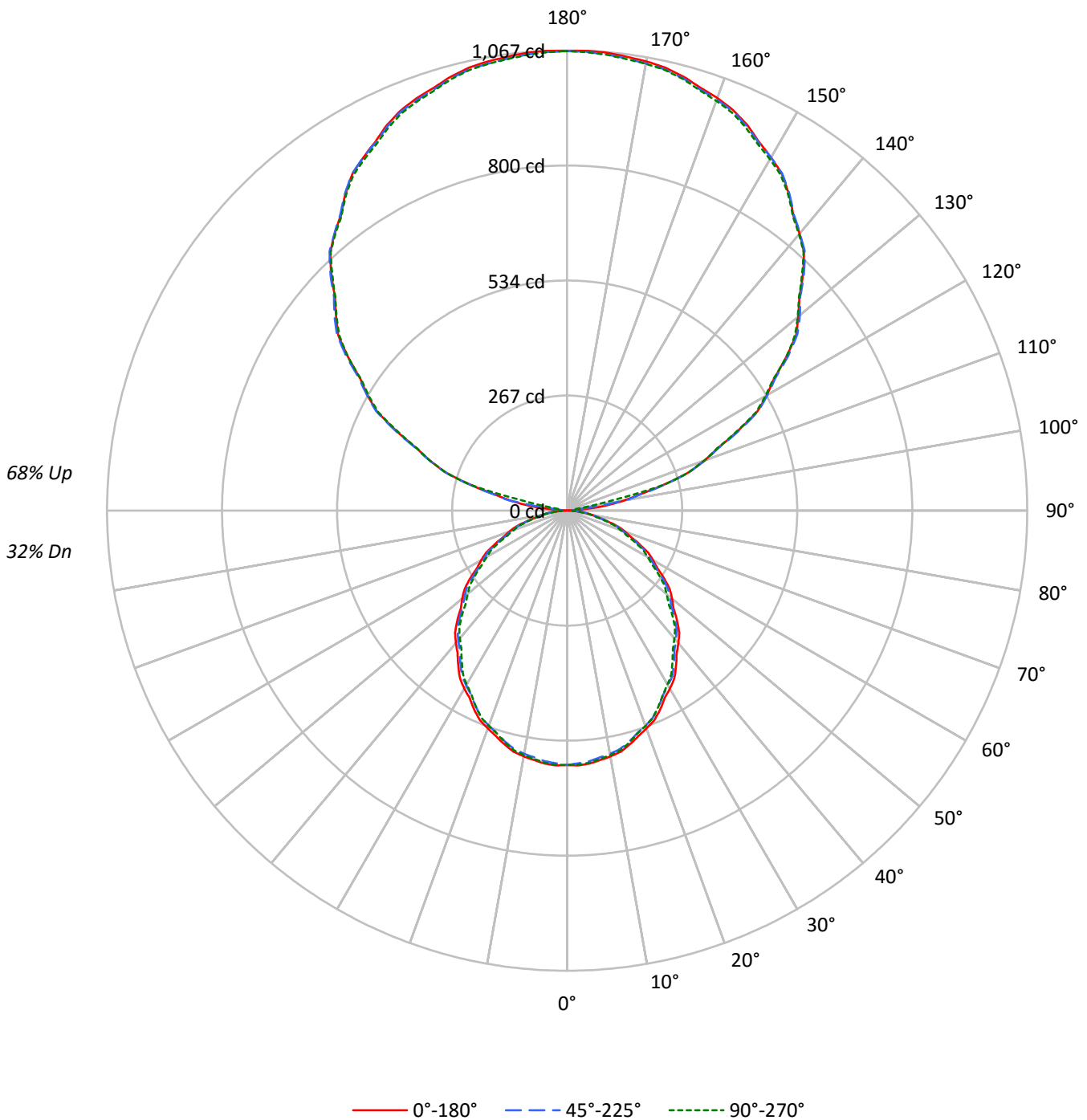
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32								
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27								
2	85	78	72	67	76	70	65	61	56	53	50	43	41	38	31	29	28	22								
3	78	69	61	56	70	62	56	51	49	45	42	38	35	33	27	25	24	19								
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16								
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14								
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16	12								
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14	11								
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10								
9	48	36	28	24	43	32	26	22	26	22	18	21	17	15	15	13	11	9								
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3810	3810	3810
5°	3818	3782	3806
10°	3796	3756	3777
15°	3754	3710	3726
20°	3696	3647	3654
25°	3632	3572	3569
30°	3554	3491	3473
35°	3470	3404	3356
40°	3384	3309	3262
45°	3291	3222	3159
50°	3189	3118	3024
55°	3090	3001	2916
60°	2971	2882	2780
65°	2832	2740	2647
70°	2696	2574	2485
75°	2458	2376	2293
80°	2187	2153	2101
85°	1904	1941	1830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	1.2
10°-20°	157.1	3.3
20°-30°	232.0	4.8
30°-40°	270.7	5.6
40°-50°	271.9	5.7
50°-60°	238.7	5.0
60°-70°	177.8	3.7
70°-80°	101.7	2.1
80°-90°	31.8	0.7
90°-100°	38.7	0.8
100°-110°	238.6	5.0
110°-120°	432.8	9.0
120°-130°	555.4	11.5
130°-140°	597.4	12.4
140°-150°	560.7	11.7
150°-160°	453.6	9.4
160°-170°	293.3	6.1
170°-180°	101.2	2.1
0°-30°	444.7	9.2
0°-40°	715.5	14.9
0°-60°	1226.0	25.5
0°-90°	1537.3	32.0
90°-120°	710.1	14.8
90°-150°	2423.5	50.4
90°-180°	3272.0	68.0
0°-180°	4809.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	589	588	583	587	587	56
15°	562	560	555	557	557	158
25°	510	507	501	502	501	234
35°	440	438	432	429	426	275
45°	360	358	353	348	346	278
55°	274	273	266	262	259	245
65°	185	184	179	175	173	184
75°	98	98	95	94	92	105
85°	26	26	26	26	25	29
90°	1	7	13	17	19	3
95°	45	41	13	16	17	57
105°	232	235	235	235	235	246
115°	436	440	441	437	433	432
125°	620	625	626	622	620	554
135°	773	778	776	775	770	596
145°	896	898	898	898	894	560
155°	987	983	984	986	980	455
165°	1042	1037	1038	1042	1036	294
175°	1065	1061	1062	1067	1061	101
180°	1065	1065	1065	1065	1065	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	591.4	591.2	591.0	590.7	590.5	589.9	589.1	588.2	587.4	586.5	587.4
5°	589.0	588.8	588.5	588.3	588.1	587.5	586.5	585.5	584.4	583.4	584.3
7.5°	583.6	583.4	583.2	583.0	582.8	582.1	581.0	579.8	578.7	577.5	578.5
10°	578.8	578.6	578.3	578.1	577.9	577.2	576.1	574.9	573.8	572.7	573.5
12.5°	572.8	572.4	572.0	571.7	571.3	570.6	569.5	568.5	567.3	566.3	566.9
15°	561.5	561.2	560.9	560.6	560.2	559.5	558.4	557.2	556.0	554.9	555.4
17.5°	548.5	548.1	547.5	547.1	546.6	545.8	544.6	543.5	542.3	541.1	541.8
20°	537.7	537.5	537.2	537.0	536.8	536.0	534.7	533.3	532.0	530.7	531.4
22.5°	526.8	526.4	526.0	525.7	525.3	524.5	523.2	522.0	520.7	519.5	520.0
25°	509.7	509.2	508.6	508.1	507.6	506.6	505.3	503.9	502.6	501.3	501.5
27.5°	489.6	489.3	489.0	488.7	488.4	487.5	486.1	484.7	483.3	481.9	482.0
30°	476.6	476.3	475.8	475.5	475.2	474.3	472.8	471.2	469.7	468.1	467.9
32.5°	462.3	461.8	461.4	460.9	460.4	459.5	458.1	456.7	455.3	453.9	453.5
35°	440.1	439.7	439.3	438.9	438.5	437.5	436.1	434.6	433.1	431.7	431.2
37.5°	417.1	416.6	416.1	415.5	415.0	414.0	412.6	411.3	409.9	408.6	407.8
40°	401.4	400.8	400.3	399.8	399.3	398.3	396.9	395.5	393.9	392.5	391.6
42.5°	384.6	384.2	383.7	383.2	382.8	381.9	380.4	379.0	377.5	376.1	375.3
45°	360.3	359.9	359.5	359.1	358.6	357.8	356.6	355.4	354.1	352.8	351.6
47.5°	334.2	334.2	334.2	334.3	334.3	333.6	332.0	330.5	329.0	327.5	326.3
50°	317.4	317.1	316.8	316.4	316.1	315.4	314.1	312.9	311.6	310.3	309.0
52.5°	300.2	299.9	299.7	299.5	299.3	298.5	297.2	295.9	294.5	293.2	292.1
55°	274.4	274.1	273.8	273.5	273.2	272.3	270.8	269.4	267.9	266.5	265.6
57.5°	247.3	247.1	246.9	246.8	246.6	245.9	244.7	243.5	242.3	241.1	239.8
60°	230.0	229.6	229.2	228.8	228.4	227.6	226.5	225.4	224.2	223.1	222.1
62.5°	212.2	211.9	211.5	211.2	210.9	210.2	209.2	208.2	207.2	206.3	205.2
65°	185.3	185.1	184.9	184.7	184.5	183.8	182.7	181.5	180.4	179.3	178.2
67.5°	159.3	158.9	158.3	157.9	157.5	156.8	156.0	155.1	154.3	153.5	152.7
70°	142.8	142.3	141.8	141.3	140.8	140.0	139.1	138.1	137.2	136.3	135.6
72.5°	124.9	124.5	124.2	123.8	123.5	123.0	122.4	121.8	121.2	120.6	119.9
75°	98.5	98.3	98.1	97.9	97.7	97.3	96.7	96.2	95.7	95.2	94.9
77.5°	74.1	74.0	73.9	73.8	73.8	73.6	73.3	73.0	72.7	72.4	72.2
80°	58.8	58.8	58.8	58.8	58.8	58.7	58.5	58.3	58.1	57.9	57.8
82.5°	45.3	45.2	45.0	44.8	44.7	44.6	44.5	44.5	44.4	44.4	44.2
85°	25.7	25.8	25.9	26.0	26.1	26.2	26.2	26.2	26.2	26.2	26.1
87.5°	10.2	10.5	10.8	11.1	11.4	11.6	11.7	11.9	12.1	12.2	12.4
90°	0.8	2.2	3.6	5.0	6.4	7.7	9.0	10.2	11.4	12.6	13.5
92.5°	12.1	11.2	10.2	9.2	8.3	8.3	9.4	10.5	11.5	12.6	13.5
95°	45.0	44.5	43.9	43.4	42.9	39.3	32.6	26.0	19.3	12.6	13.5
97.5°	94.0	94.9	95.8	96.8	97.8	91.7	78.5	65.2	52.0	38.9	33.9
100°	131.9	132.4	132.9	133.5	134.0	134.6	135.3	136.0	136.7	137.4	111.3
102.5°	170.5	171.1	171.8	172.4	173.1	173.6	174.1	174.5	174.9	175.3	170.4
105°	232.2	232.9	233.6	234.3	235.0	235.3	235.3	235.3	235.3	235.3	235.3
107.5°	296.3	296.3	296.3	296.3	296.3	296.5	296.8	297.2	297.5	297.9	297.9
110°	338.0	338.0	338.0	338.0	338.0	338.2	338.5	338.9	339.2	339.6	339.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	377.2	377.6	378.0	378.5	378.9	379.2	379.4	379.6	379.8	380.0	379.4
115°	436.0	436.9	437.7	438.6	439.5	440.0	440.2	440.3	440.5	440.7	440.0
117.5°	496.8	496.8	496.7	496.7	496.7	497.0	497.6	498.3	499.0	499.6	498.7
120°	534.6	534.5	534.3	534.1	533.9	534.1	534.6	535.2	535.7	536.2	535.9
122.5°	568.2	568.9	569.5	570.2	570.8	571.3	571.5	571.8	572.0	572.3	571.9
125°	620.0	621.2	622.4	623.7	624.9	625.5	625.5	625.5	625.5	625.5	624.8
127.5°	669.4	670.2	671.2	672.1	672.9	673.3	673.2	673.1	673.0	672.9	672.5
130°	699.7	700.6	701.5	702.4	703.3	703.8	704.0	704.1	704.3	704.5	704.0
132.5°	730.0	731.0	732.1	733.1	734.2	734.5	734.1	733.7	733.3	732.9	732.8
135°	773.2	774.3	775.3	776.4	777.4	777.7	777.4	777.0	776.7	776.4	776.0
137.5°	812.8	813.7	814.7	815.6	816.5	816.8	816.5	816.2	815.9	815.5	815.6
140°	838.7	839.1	839.4	839.8	840.1	840.2	840.0	839.9	839.7	839.5	839.9
142.5°	862.1	862.3	862.5	862.7	862.9	863.1	863.4	863.6	863.9	864.1	864.2
145°	896.4	896.8	897.1	897.5	897.8	898.0	898.0	898.0	898.0	898.0	898.2
147.5°	926.3	926.3	926.2	926.1	926.1	926.1	926.3	926.6	926.9	927.1	927.3
150°	945.3	945.0	944.6	944.3	943.9	943.9	944.3	944.6	945.0	945.3	945.7
152.5°	963.7	962.9	962.1	961.4	960.6	960.4	960.7	961.1	961.4	961.8	962.1
155°	987.2	986.1	985.1	984.0	983.0	982.6	983.0	983.3	983.7	984.0	984.5
157.5°	1005.3	1004.7	1004.1	1003.5	1002.8	1002.5	1002.6	1002.6	1002.6	1002.7	1003.2
160°	1018.0	1016.9	1015.9	1014.8	1013.8	1013.4	1013.5	1013.7	1013.9	1014.0	1014.7
162.5°	1028.1	1027.0	1026.0	1024.9	1023.9	1023.5	1023.6	1023.8	1024.0	1024.2	1025.1
165°	1041.7	1040.7	1039.6	1038.5	1037.4	1037.0	1037.2	1037.4	1037.5	1037.7	1038.8
167.5°	1051.8	1050.8	1049.7	1048.5	1047.4	1047.0	1047.1	1047.3	1047.5	1047.7	1048.9
170°	1057.5	1056.2	1055.0	1053.8	1052.6	1052.1	1052.2	1052.4	1052.6	1052.8	1054.2
172.5°	1061.3	1060.1	1058.8	1057.6	1056.3	1055.9	1056.2	1056.5	1056.8	1057.1	1058.4
175°	1065.4	1064.3	1063.3	1062.3	1061.2	1060.8	1060.9	1061.1	1061.3	1061.5	1062.9
177.5°	1067.3	1066.4	1065.6	1064.8	1063.9	1063.6	1063.7	1063.8	1064.0	1064.1	1065.1
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	588.2	589.1	589.9	590.3	590.2	590.1	590.1	590.0
5°	585.2	586.2	587.1	587.5	587.4	587.3	587.2	587.1
7.5°	579.4	580.3	581.2	581.6	581.5	581.4	581.3	581.2
10°	574.3	575.1	576.0	576.3	576.2	576.1	576.0	575.9
12.5°	567.6	568.4	569.0	569.3	569.3	569.3	569.3	569.2
15°	555.9	556.4	557.0	557.2	557.2	557.2	557.2	557.2
17.5°	542.4	543.0	543.7	543.7	543.2	542.7	542.2	541.7
20°	532.1	532.8	533.5	533.7	533.1	532.6	532.1	531.6
22.5°	520.4	520.9	521.4	521.4	521.1	520.7	520.4	520.0
25°	501.7	501.9	502.1	502.0	501.7	501.4	501.1	500.8
27.5°	482.0	482.0	482.1	482.0	481.6	481.3	481.0	480.7
30°	467.7	467.5	467.3	467.1	466.8	466.5	466.1	465.7
32.5°	453.2	452.8	452.4	452.0	451.4	450.8	450.3	449.7
35°	430.7	430.2	429.6	429.0	428.2	427.3	426.5	425.7
37.5°	407.1	406.3	405.5	404.9	404.3	403.9	403.4	402.9
40°	390.6	389.7	388.8	388.2	387.9	387.5	387.2	386.9
42.5°	374.4	373.5	372.6	372.0	371.5	371.0	370.6	370.1
45°	350.3	349.1	347.9	347.1	346.8	346.5	346.2	345.9
47.5°	325.0	323.8	322.4	321.4	320.7	320.0	319.3	318.6
50°	307.7	306.3	305.0	304.0	303.2	302.5	301.7	301.0
52.5°	290.8	289.6	288.4	287.5	286.7	285.9	285.1	284.3
55°	264.6	263.7	262.8	262.0	261.3	260.4	259.7	259.0
57.5°	238.6	237.4	236.2	235.4	235.0	234.6	234.2	233.8
60°	221.1	219.9	218.9	218.0	217.3	216.6	215.9	215.2
62.5°	204.1	202.9	201.8	201.0	200.5	199.9	199.2	198.7
65°	177.3	176.4	175.5	174.8	174.4	174.0	173.6	173.2
67.5°	151.9	151.1	150.3	149.8	149.6	149.3	149.1	148.8
70°	135.0	134.4	133.8	133.3	132.9	132.5	132.0	131.6
72.5°	119.2	118.5	117.8	117.2	116.8	116.4	115.9	115.5
75°	94.6	94.3	93.9	93.6	93.2	92.8	92.4	91.9
77.5°	72.1	71.9	71.7	71.5	71.2	70.9	70.6	70.3
80°	57.7	57.6	57.5	57.3	57.1	56.9	56.7	56.5
82.5°	44.0	43.8	43.7	43.5	43.5	43.5	43.4	43.4
85°	26.0	25.9	25.8	25.5	25.3	25.1	24.9	24.7
87.5°	12.6	12.7	12.9	13.0	12.9	12.8	12.8	12.7
90°	14.4	15.2	16.2	16.9	17.4	17.9	18.4	19.0
92.5°	14.4	15.2	16.2	16.7	17.0	17.2	17.5	17.7
95°	14.4	15.2	16.2	16.6	16.6	16.6	16.6	16.6
97.5°	29.0	24.0	19.1	16.6	16.6	16.6	16.6	16.6
100°	85.1	59.0	32.8	19.4	18.7	18.0	17.3	16.6
102.5°	165.4	160.5	155.5	147.1	135.1	123.2	111.3	99.4
105°	235.3	235.3	235.3	235.3	235.1	234.9	234.7	234.6
107.5°	298.0	298.0	298.0	297.8	297.3	296.7	296.2	295.7
110°	338.5	338.0	337.5	337.3	337.5	337.7	337.8	338.0



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CATALOG NUMBER: S125DIP-S375D810U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	378.7	378.0	377.4	376.9	376.7	376.4	376.2	376.0
115°	439.3	438.6	437.9	437.0	436.0	434.8	433.8	432.8
117.5°	497.8	496.9	495.9	495.2	494.8	494.3	493.9	493.4
120°	535.5	535.2	534.8	534.2	533.3	532.5	531.6	530.7
122.5°	571.6	571.2	570.9	570.2	569.2	568.2	567.1	566.1
125°	624.1	623.4	622.7	622.1	621.6	621.0	620.5	620.0
127.5°	672.1	671.8	671.4	670.4	669.2	667.9	666.6	665.3
130°	703.4	702.9	702.4	701.7	700.7	699.9	699.0	698.1
132.5°	732.7	732.6	732.5	732.0	731.1	730.2	729.3	728.5
135°	775.7	775.3	775.0	774.3	773.2	772.1	771.0	770.0
137.5°	815.7	815.7	815.8	815.4	814.5	813.5	812.6	811.7
140°	840.2	840.6	840.9	840.6	839.5	838.5	837.4	836.4
142.5°	864.3	864.3	864.4	863.9	862.9	861.8	860.8	859.7
145°	898.3	898.5	898.7	898.2	897.2	896.2	895.0	894.0
147.5°	927.5	927.7	927.9	927.4	926.0	924.8	923.5	922.3
150°	946.0	946.4	946.7	946.2	944.8	943.4	942.0	940.6
152.5°	962.5	962.8	963.2	962.7	961.5	960.2	959.0	957.7
155°	985.1	985.6	986.1	985.7	984.3	982.9	981.5	980.1
157.5°	1003.8	1004.4	1004.9	1004.5	1003.1	1001.7	1000.3	998.9
160°	1015.4	1016.1	1016.8	1016.5	1015.1	1013.7	1012.3	1010.9
162.5°	1026.1	1027.1	1028.0	1027.8	1026.2	1024.7	1023.2	1021.7
165°	1039.9	1040.9	1042.0	1041.8	1040.4	1038.9	1037.5	1036.1
167.5°	1050.3	1051.5	1052.8	1052.6	1051.0	1049.5	1047.8	1046.3
170°	1055.5	1056.9	1058.3	1058.2	1056.7	1055.1	1053.5	1052.0
172.5°	1059.7	1061.0	1062.3	1062.1	1060.5	1058.9	1057.3	1055.7
175°	1064.2	1065.6	1067.0	1066.9	1065.4	1063.8	1062.3	1060.7
177.5°	1066.1	1067.0	1068.0	1068.0	1066.8	1065.7	1064.6	1063.5
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4

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