

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: P331976-927

Luminaire Tested: **S123DIP-S775D805U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331976-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIP-S775D805U927-4F0-1E-UDD-D
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 775 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 805 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5103.3 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.08')
CIE Type: General Diffuse

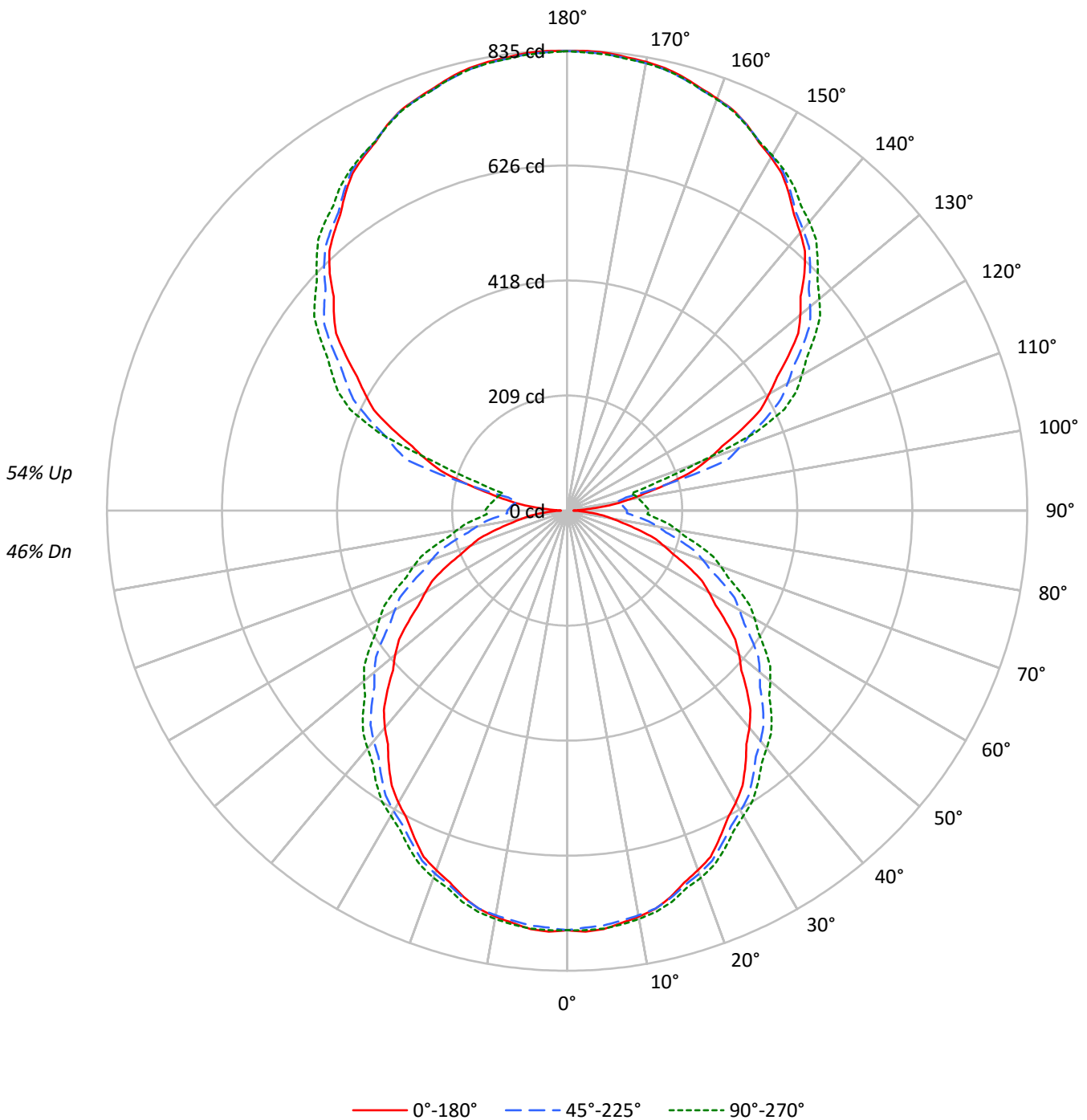
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P331976-927

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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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	96	91	87	83	88	84	80	77	70	67	65	57	55	53	45	44	42	37
2	87	79	73	67	79	73	67	62	60	56	53	49	46	44	39	37	35	30
3	79	69	62	55	72	64	57	51	53	48	44	43	40	36	34	32	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	48	40	34	55	45	37	32	38	32	28	31	27	23	25	21	19	16
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17	14
8	52	40	32	26	48	37	30	25	31	25	21	26	21	18	21	17	15	12
9	48	36	28	23	44	33	27	22	28	23	19	23	19	16	19	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	18	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8196	8196	8196
5°	8222	7990	7994
10°	8148	7806	7766
15°	8043	7597	7518
20°	7893	7358	7245
25°	7708	7084	6957
30°	7517	6836	6666
35°	7305	6575	6434
40°	7102	6337	6184
45°	6877	6109	5986
50°	6655	5883	5766
55°	6409	5652	5569
60°	6171	5417	5366
65°	5924	5168	5126
70°	5555	4887	4879
75°	5090	4566	4628
80°	4551	4249	4341
85°	4050	4032	4175



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	1.4
10°-20°	205.8	4.0
20°-30°	307.8	6.0
30°-40°	367.5	7.2
40°-50°	384.5	7.5
50°-60°	360.9	7.1
60°-70°	301.4	5.9
70°-80°	215.6	4.2
80°-90°	130.9	2.6
90°-100°	111.0	2.2
100°-110°	203.7	4.0
110°-120°	386.6	7.6
120°-130°	464.4	9.1
130°-140°	482.2	9.4
140°-150°	443.6	8.7
150°-160°	356.1	7.0
160°-170°	229.8	4.5
170°-180°	79.2	1.6
0°-30°	585.7	11.5
0°-40°	953.3	18.7
0°-60°	1698.6	33.3
0°-90°	2346.6	46.0
90°-120°	701.3	13.7
90°-150°	2091.6	41.0
90°-180°	2757.0	54.0
0°-180°	5103.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	762	760	756	762	761	72
15°	726	728	728	735	735	204
25°	655	663	666	676	677	302
35°	564	577	588	600	604	353
45°	461	481	502	517	524	356
55°	352	379	409	430	438	315
65°	243	276	312	336	345	240
75°	132	171	212	239	250	141
85°	41	82	126	153	163	43
90°	11	58	109	138	149	9
95°	47	56	101	130	140	54
105°	191	215	198	117	120	202
115°	350	365	399	425	435	346
125°	490	497	522	540	548	438
135°	609	613	624	640	643	469
145°	702	705	707	714	718	439
155°	772	771	772	774	771	356
165°	814	813	812	816	812	230
175°	834	831	831	835	830	79
180°	834	834	834	834	834	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	761.4	761.4	761.4	761.4	761.4	761.4	761.4	761.4	761.4	761.4	761.4
2.5°	764.8	764.3	763.9	763.4	763.0	762.2	761.0	759.9	758.7	757.5	758.7
5°	762.3	761.9	761.5	761.2	760.8	760.1	759.0	757.9	756.8	755.7	757.2
7.5°	754.8	754.9	754.9	755.0	755.1	754.6	753.5	752.5	751.4	750.4	752.2
10°	748.2	748.5	748.9	749.3	749.6	749.4	748.5	747.6	746.6	745.7	747.6
12.5°	740.2	740.8	741.2	741.8	742.3	742.3	741.6	741.0	740.4	739.7	741.4
15°	725.8	726.4	726.9	727.5	728.0	728.2	728.0	727.9	727.6	727.5	729.3
17.5°	707.6	708.7	709.8	710.8	711.9	712.5	712.4	712.3	712.3	712.2	713.8
20°	694.3	695.4	696.5	697.6	698.7	699.4	699.8	700.2	700.5	700.9	702.6
22.5°	680.3	681.4	682.5	683.7	684.8	685.6	686.1	686.6	687.1	687.6	689.8
25°	655.3	657.1	658.9	660.8	662.7	663.8	664.4	665.0	665.5	666.1	668.4
27.5°	630.1	632.2	634.3	636.4	638.5	640.1	641.3	642.5	643.6	644.8	646.9
30°	612.1	614.6	617.0	619.3	621.7	623.7	625.1	626.6	628.1	629.5	631.8
32.5°	592.2	594.9	597.6	600.3	603.0	605.3	607.2	609.2	611.1	613.0	615.4
35°	564.0	567.0	570.0	572.9	575.8	578.5	580.9	583.3	585.7	588.1	590.9
37.5°	534.2	537.5	540.8	544.2	547.5	550.6	553.6	556.5	559.4	562.4	565.5
40°	514.3	517.6	520.9	524.3	527.5	531.1	534.7	538.4	542.1	545.8	548.9
42.5°	492.3	496.5	500.5	504.5	508.6	512.5	516.3	520.2	524.0	527.9	531.3
45°	461.2	465.6	470.0	474.4	478.9	483.4	488.0	492.6	497.3	501.8	505.3
47.5°	428.5	433.6	438.6	443.5	448.5	453.7	459.0	464.2	469.5	474.8	478.7
50°	407.3	412.4	417.6	422.8	427.9	433.3	439.1	444.8	450.5	456.2	460.4
52.5°	384.7	390.1	395.6	401.1	406.5	412.4	418.7	425.0	431.3	437.6	442.0
55°	351.7	357.7	363.8	369.9	376.0	382.4	389.0	395.7	402.3	408.9	413.9
57.5°	319.5	325.8	332.2	338.5	344.9	351.6	358.9	366.2	373.4	380.7	385.7
60°	297.0	303.6	310.2	316.9	323.5	330.6	338.2	345.7	353.2	360.8	366.0
62.5°	275.7	282.5	289.3	296.0	302.9	310.2	318.2	326.2	334.2	342.2	347.4
65°	243.0	250.3	257.4	264.6	271.8	279.4	287.6	295.6	303.8	311.9	317.4
67.5°	209.8	217.5	225.1	232.7	240.3	248.3	256.6	264.8	273.1	281.4	287.4
70°	186.6	194.6	202.5	210.4	218.3	226.7	235.6	244.4	253.3	262.1	268.0
72.5°	165.4	173.3	181.3	189.2	197.1	205.7	214.8	223.9	233.1	242.2	248.3
75°	131.9	140.5	149.2	157.9	166.5	175.5	184.7	193.9	203.1	212.4	218.4
77.5°	102.7	111.5	120.2	128.9	137.6	146.6	156.0	165.2	174.5	183.8	190.2
80°	82.1	91.2	100.2	109.2	118.3	127.5	137.1	146.7	156.3	165.9	172.1
82.5°	64.2	73.4	82.5	91.7	100.9	110.4	120.1	129.8	139.6	149.3	155.6
85°	40.6	49.8	59.1	68.3	77.5	87.0	96.8	106.5	116.3	126.1	132.4
87.5°	22.2	31.6	41.1	50.5	60.0	69.6	79.4	89.1	98.9	108.7	115.0
90°	11.4	21.8	32.2	42.6	53.0	63.8	75.0	86.2	97.4	108.6	115.4
92.5°	21.6	29.4	37.2	44.9	52.7	61.9	72.5	83.1	93.6	104.3	111.3
95°	46.9	48.5	50.0	51.6	53.1	59.1	69.7	80.2	90.8	101.3	108.0
97.5°	84.1	88.0	92.0	95.9	99.9	101.2	100.0	98.6	97.4	96.1	102.7
100°	112.1	120.8	129.4	138.1	146.7	144.6	131.6	118.6	105.6	92.6	99.0
102.5°	144.2	151.5	158.8	166.0	173.3	169.4	154.3	139.2	124.1	108.9	110.7
105°	191.2	197.1	203.0	209.0	214.9	215.7	211.2	206.8	202.3	197.8	178.6
107.5°	240.0	244.9	249.9	254.9	259.9	267.1	276.6	286.1	295.6	305.0	292.1
110°	272.5	276.9	281.4	285.8	290.2	296.8	305.7	314.7	323.5	332.4	332.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	304.2	307.9	311.6	315.4	319.1	325.3	333.8	342.5	351.0	359.7	364.3
115°	350.4	353.4	356.4	359.5	362.5	368.0	375.8	383.7	391.6	399.4	405.3
117.5°	395.6	398.0	400.4	402.8	405.2	409.8	416.7	423.5	430.4	437.3	442.8
120°	423.2	425.4	427.5	429.7	431.9	436.2	442.7	449.2	455.7	462.2	467.5
122.5°	451.9	453.4	455.0	456.5	458.0	461.8	468.2	474.4	480.8	487.1	491.9
125°	490.5	491.6	492.7	493.8	495.0	498.4	504.3	510.2	516.1	522.0	526.2
127.5°	528.7	529.6	530.5	531.4	532.3	535.4	540.4	545.5	550.6	555.6	559.8
130°	552.5	553.3	554.3	555.2	556.1	558.7	562.9	567.2	571.4	575.7	579.7
132.5°	574.6	575.7	576.7	577.7	578.8	581.1	584.5	587.8	591.2	594.6	598.5
135°	609.2	609.8	610.5	611.2	611.8	613.4	616.0	618.5	621.2	623.7	627.4
137.5°	638.8	639.7	640.6	641.5	642.4	643.6	645.0	646.4	647.8	649.4	652.9
140°	657.9	658.8	659.6	660.4	661.2	662.1	663.1	664.1	665.0	666.0	669.3
142.5°	676.3	676.9	677.6	678.3	679.0	679.6	680.1	680.6	681.1	681.7	684.6
145°	701.9	702.7	703.5	704.3	705.0	705.5	705.8	706.1	706.4	706.6	708.4
147.5°	725.2	725.9	726.5	727.1	727.8	728.3	728.5	728.7	729.0	729.3	730.0
150°	740.1	740.5	740.9	741.3	741.7	742.1	742.4	742.7	742.9	743.2	743.5
152.5°	753.4	753.7	753.8	754.1	754.2	754.4	754.6	754.7	754.9	755.1	755.6
155°	772.3	772.1	771.7	771.5	771.2	771.1	771.3	771.4	771.5	771.7	772.4
157.5°	786.9	786.9	786.9	786.8	786.8	786.7	786.6	786.5	786.3	786.2	787.0
160°	795.8	795.7	795.6	795.4	795.3	795.1	795.0	794.9	794.7	794.6	795.4
162.5°	804.2	803.9	803.5	803.2	802.8	802.6	802.4	802.3	802.2	802.0	803.0
165°	814.4	814.0	813.6	813.2	812.8	812.5	812.4	812.2	812.1	811.9	813.0
167.5°	822.4	821.8	821.3	820.7	820.1	819.8	819.8	819.8	819.8	819.8	820.9
170°	826.8	826.2	825.7	825.1	824.6	824.3	824.3	824.3	824.3	824.3	825.5
172.5°	829.7	829.1	828.5	827.8	827.1	826.9	827.0	827.0	827.2	827.3	828.4
175°	833.6	832.9	832.3	831.6	830.8	830.6	830.7	830.8	831.0	831.2	832.1
177.5°	834.6	834.1	833.5	833.0	832.4	832.2	832.3	832.4	832.5	832.6	833.5
180°	833.6	833.6	833.6	833.6	833.6	833.6	833.6	833.6	833.6	833.6	833.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	761.4	761.4	761.4	761.4	761.4	761.4	761.4	761.4
2.5°	759.9	761.0	762.2	762.7	762.6	762.4	762.2	762.2
5°	758.6	760.1	761.5	762.2	762.0	761.8	761.7	761.4
7.5°	754.0	755.9	757.7	758.5	758.3	758.1	757.9	757.6
10°	749.4	751.2	753.0	753.8	753.4	753.0	752.7	752.3
12.5°	743.1	744.8	746.5	747.2	746.8	746.5	746.1	745.7
15°	731.1	733.0	734.8	735.6	735.5	735.3	735.1	734.9
17.5°	715.5	717.2	718.8	719.5	719.3	719.0	718.7	718.5
20°	704.3	705.9	707.6	708.4	708.7	708.8	709.0	709.2
22.5°	691.8	694.0	696.0	697.0	697.0	696.8	696.7	696.6
25°	670.9	673.3	675.7	676.8	676.8	676.8	676.8	676.8
27.5°	649.0	651.0	653.1	654.2	654.3	654.5	654.7	654.8
30°	634.0	636.2	638.4	639.5	639.5	639.5	639.5	639.5
32.5°	617.7	620.0	622.4	623.8	624.2	624.7	625.1	625.6
35°	593.7	596.4	599.1	600.9	601.7	602.4	603.1	603.9
37.5°	568.6	571.8	574.9	576.8	577.3	578.0	578.5	579.2
40°	552.1	555.2	558.3	560.2	561.0	561.7	562.4	563.2
42.5°	534.7	538.1	541.6	543.8	544.9	545.9	546.9	548.0
45°	508.8	512.3	515.9	518.3	519.8	521.3	522.8	524.3
47.5°	482.7	486.6	490.6	493.1	494.2	495.4	496.5	497.6
50°	464.7	468.9	473.2	475.9	477.2	478.5	479.8	481.1
52.5°	446.4	450.8	455.2	458.2	459.8	461.4	463.0	464.5
55°	418.9	423.9	428.8	432.1	433.6	435.0	436.5	438.0
57.5°	390.8	395.8	400.8	404.2	405.9	407.7	409.3	411.1
60°	371.1	376.3	381.4	385.1	387.1	389.1	391.2	393.2
62.5°	352.6	357.7	362.9	366.4	368.3	370.2	372.1	373.9
65°	323.0	328.4	334.0	337.7	339.5	341.4	343.3	345.1
67.5°	293.4	299.5	305.5	309.3	310.9	312.4	314.0	315.5
70°	273.9	279.8	285.7	289.5	291.4	293.3	295.1	297.0
72.5°	254.3	260.3	266.4	270.4	272.2	274.0	275.8	277.7
75°	224.5	230.6	236.7	240.8	243.0	245.3	247.5	249.7
77.5°	196.6	203.0	209.5	213.5	215.2	216.9	218.6	220.3
80°	178.4	184.7	191.0	195.0	196.9	198.7	200.6	202.4
82.5°	161.8	168.1	174.4	178.4	180.3	182.1	183.9	185.8
85°	138.6	144.9	151.1	155.2	157.0	158.9	160.7	162.6
87.5°	121.4	127.8	134.2	138.3	140.2	142.1	144.0	145.9
90°	122.2	129.0	135.9	140.3	142.4	144.6	146.7	148.8
92.5°	118.3	125.2	132.3	136.7	138.6	140.5	142.3	144.2
95°	114.7	121.4	128.0	132.3	134.1	135.9	137.8	139.7
97.5°	109.2	115.9	122.5	126.7	128.7	130.7	132.7	134.7
100°	105.5	111.9	118.4	122.6	124.6	126.6	128.6	130.6
102.5°	112.5	114.3	116.1	118.0	120.1	122.2	124.3	126.4
105°	159.5	140.2	121.0	112.4	114.3	116.3	118.2	120.2
107.5°	279.2	266.3	253.3	238.4	221.7	205.0	188.2	171.5
110°	332.9	333.2	333.4	324.4	306.3	288.0	269.8	251.6



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CATALOG NUMBER: S123DIP-S775D805U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	369.1	373.8	378.6	379.6	377.1	374.5	372.0	369.5
115°	411.1	416.8	422.6	426.6	428.6	430.6	432.6	434.7
117.5°	448.2	453.7	459.2	462.7	464.3	465.8	467.4	468.9
120°	472.9	478.2	483.5	486.9	488.1	489.4	490.8	492.0
122.5°	496.9	501.7	506.5	509.7	511.1	512.5	513.9	515.3
125°	530.3	534.4	538.6	541.5	543.0	544.5	546.1	547.7
127.5°	563.9	567.9	572.0	574.6	575.5	576.6	577.5	578.5
130°	583.8	587.8	591.8	594.3	595.1	596.0	596.8	597.6
132.5°	602.5	606.3	610.2	612.6	613.5	614.3	615.2	616.1
135°	631.1	634.9	638.7	640.7	641.3	641.7	642.3	642.8
137.5°	656.5	660.0	663.6	665.7	666.4	667.0	667.7	668.3
140°	672.6	676.0	679.2	681.2	681.9	682.5	683.2	683.8
142.5°	687.5	690.4	693.3	695.1	695.5	696.1	696.6	697.2
145°	710.1	711.9	713.7	714.9	715.7	716.4	717.1	717.9
147.5°	730.8	731.5	732.2	732.5	732.6	732.6	732.7	732.7
150°	743.7	744.0	744.3	744.4	744.3	744.3	744.3	744.3
152.5°	756.1	756.5	757.1	757.0	756.5	755.9	755.3	754.8
155°	773.1	773.7	774.4	774.4	773.6	772.7	771.9	771.0
157.5°	787.8	788.6	789.5	789.3	788.3	787.2	786.2	785.1
160°	796.2	797.1	797.9	797.8	796.9	795.9	795.0	794.0
162.5°	803.9	804.9	805.7	805.8	804.9	804.1	803.3	802.4
165°	814.1	815.2	816.3	816.4	815.5	814.4	813.5	812.5
167.5°	822.0	823.2	824.3	824.3	823.2	822.0	820.9	819.8
170°	826.5	827.6	828.7	828.7	827.6	826.5	825.5	824.3
172.5°	829.5	830.6	831.7	831.6	830.4	829.3	828.0	826.8
175°	833.1	834.0	835.0	834.9	833.9	832.7	831.6	830.5
177.5°	834.4	835.3	836.1	836.1	835.0	833.9	832.7	831.6
180°	833.6	833.6	833.6	833.6	833.6	833.6	833.6	833.6

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