

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: P331364-927

Luminaire Tested: **S122DIP-S675D925U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331364-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIP-S675D925U927-4F0-1E-UDD-F1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 675 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 925 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4763.0 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.3
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

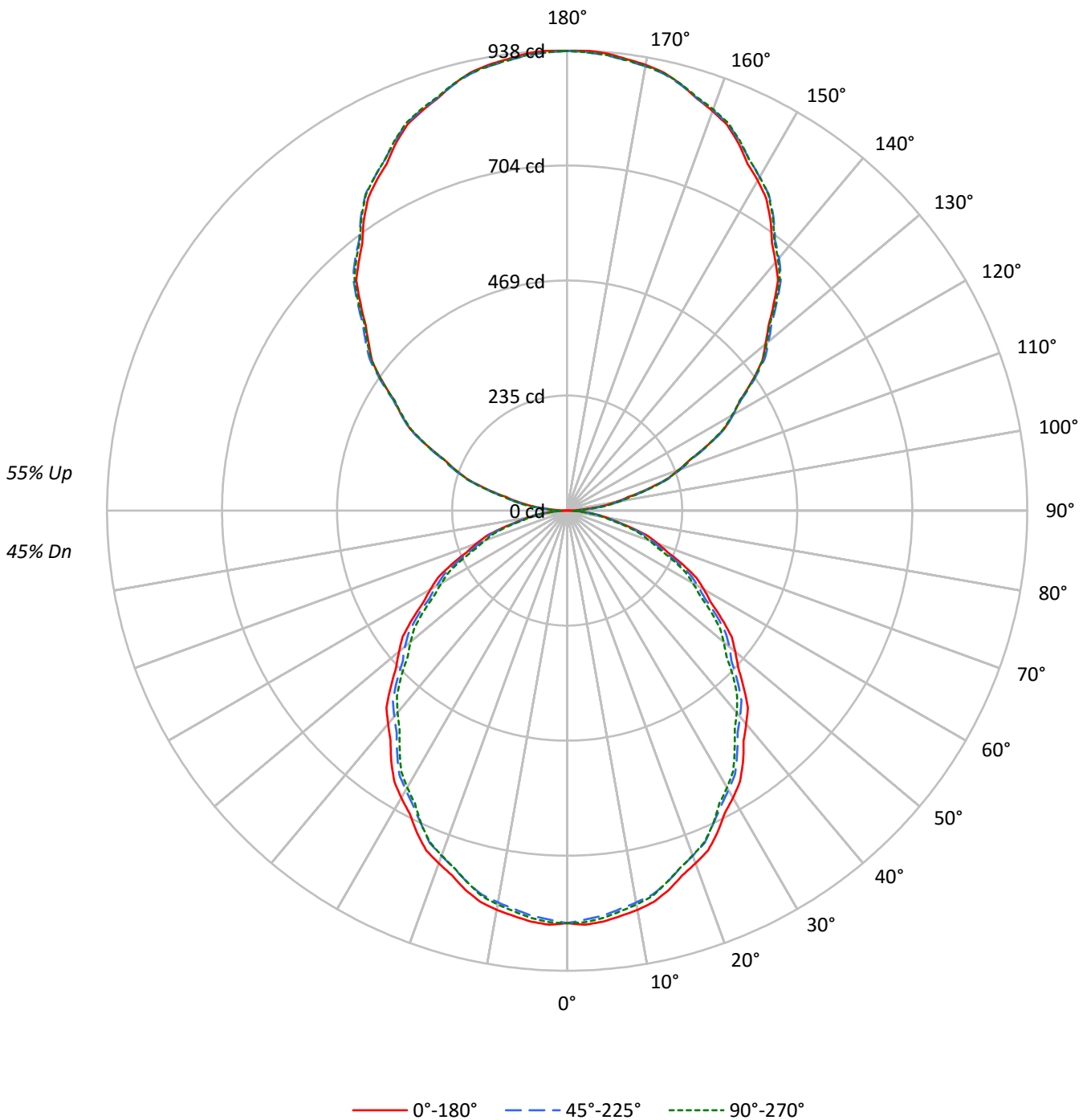
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45					45			
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	45	44	43	38					38			
2	88	81	75	69	80	74	69	64	62	58	55	51	48	45	40	38	37	32					32			
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31	27					27			
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27	23					23			
5	67	56	48	42	61	51	44	39	43	38	34	36	32	29	29	26	23	20					20			
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21	18					18			
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16					16			
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14					14			
9	49	37	30	25	45	35	28	23	30	24	21	25	21	18	20	17	15	13					13			
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	11					11			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13580	13580	13580
5°	13632	13434	13514
10°	13550	13298	13365
15°	13382	13125	13112
20°	13144	12866	12854
25°	12909	12549	12549
30°	12603	12258	12152
35°	12321	11907	11732
40°	11965	11556	11335
45°	11615	11209	10930
50°	11233	10846	10462
55°	10835	10427	10038
60°	10395	9923	9558
65°	9918	9425	8993
70°	9314	8818	8398
75°	8478	8122	7923
80°	7522	7290	6918
85°	6150	5835	5243



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.1	1.7
10°-20°	222.5	4.7
20°-30°	327.1	6.9
30°-40°	379.9	8.0
40°-50°	379.5	8.0
50°-60°	331.0	6.9
60°-70°	244.7	5.1
70°-80°	138.6	2.9
80°-90°	41.0	0.9
90°-100°	59.4	1.2
100°-110°	184.4	3.9
110°-120°	315.1	6.6
120°-130°	414.4	8.7
130°-140°	465.2	9.8
140°-150°	456.1	9.6
150°-160°	382.5	8.0
160°-170°	253.7	5.3
170°-180°	88.7	1.9
0°-30°	628.7	13.2
0°-40°	1008.6	21.2
0°-60°	1719.1	36.1
0°-90°	2143.5	45.0
90°-120°	558.9	11.7
90°-150°	1894.5	39.8
90°-180°	2620.0	55.0
0°-180°	4763.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	841	841	841	841	841	
5°	841	838	829	835	834	80
15°	801	795	785	788	784	225
25°	725	718	704	706	704	333
35°	625	617	604	599	595	390
45°	509	503	491	482	479	392
55°	385	380	370	361	357	344
65°	260	254	247	240	235	257
75°	136	134	130	126	127	145
85°	33	32	32	29	28	38
90°	1	11	28	26	27	4
95°	41	49	51	50	49	47
105°	170	172	174	175	176	180
115°	316	321	319	318	316	313
125°	460	467	465	463	462	411
135°	595	604	606	605	602	460
145°	722	728	733	733	730	451
155°	826	828	831	834	832	380
165°	899	898	898	903	900	253
175°	935	933	931	936	932	89
180°	937	937	937	937	937	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	841.1	841.1	841.1	841.1	841.1	841.1	841.1	841.1	841.1	841.1	841.1
2.5°	844.9	844.2	843.5	842.8	842.1	840.9	839.3	837.7	836.1	834.6	836.0
5°	841.1	840.3	839.6	838.9	838.2	836.9	834.9	832.9	830.9	828.9	830.4
7.5°	833.6	832.5	831.4	830.3	829.2	827.6	825.6	823.6	821.6	819.5	820.9
10°	826.5	825.2	823.9	822.7	821.5	819.8	817.6	815.5	813.3	811.1	812.5
12.5°	816.8	815.7	814.5	813.4	812.3	810.7	808.5	806.4	804.2	802.1	803.1
15°	800.6	799.5	798.4	797.4	796.3	794.6	792.3	789.9	787.6	785.2	786.0
17.5°	779.9	778.8	777.8	776.7	775.6	773.9	771.5	769.1	766.8	764.4	765.2
20°	765.0	764.0	762.9	761.8	760.7	758.9	756.4	753.9	751.4	748.8	749.4
22.5°	750.1	748.6	747.1	745.6	744.1	742.2	739.8	737.4	735.1	732.7	732.8
25°	724.6	723.2	721.8	720.3	718.8	716.6	713.5	710.5	707.4	704.4	704.7
27.5°	695.5	694.2	692.9	691.6	690.3	688.5	686.0	683.7	681.2	678.8	678.3
30°	676.0	674.6	673.2	671.8	670.3	668.3	665.6	662.9	660.2	657.5	657.0
32.5°	655.4	654.2	653.1	651.9	650.8	648.8	645.9	643.1	640.2	637.4	636.4
35°	625.1	623.4	621.5	619.7	617.9	615.6	612.8	609.8	607.0	604.1	603.0
37.5°	591.0	589.4	587.8	586.2	584.7	582.4	579.6	576.7	573.9	570.9	569.6
40°	567.7	566.3	564.8	563.4	562.0	559.8	556.9	554.1	551.2	548.3	546.7
42.5°	545.1	543.6	542.2	540.7	539.3	537.2	534.2	531.4	528.5	525.7	523.9
45°	508.7	507.4	506.1	504.9	503.7	501.7	499.0	496.3	493.6	490.9	488.9
47.5°	472.5	471.3	470.1	468.9	467.7	465.7	462.9	460.1	457.3	454.5	452.4
50°	447.2	446.3	445.4	444.5	443.6	441.9	439.4	436.9	434.4	431.8	429.4
52.5°	422.6	421.4	420.3	419.1	417.9	416.1	413.8	411.4	409.0	406.6	404.6
55°	384.9	383.9	382.8	381.7	380.6	379.0	376.8	374.7	372.6	370.4	368.2
57.5°	347.1	346.3	345.4	344.5	343.6	342.1	339.7	337.3	334.9	332.6	330.4
60°	321.9	321.2	320.4	319.7	319.0	317.3	314.9	312.4	309.8	307.3	305.3
62.5°	297.3	296.1	295.0	293.8	292.7	291.1	289.2	287.2	285.3	283.4	281.5
65°	259.6	258.5	257.5	256.4	255.2	253.8	252.1	250.3	248.4	246.7	245.0
67.5°	221.3	220.4	219.5	218.6	217.8	216.6	214.9	213.3	211.8	210.1	208.8
70°	197.3	196.6	195.9	195.2	194.5	193.3	191.6	190.0	188.5	186.8	185.5
72.5°	172.8	172.0	171.3	170.6	169.8	169.0	167.9	166.9	165.9	164.8	163.6
75°	135.9	135.5	135.1	134.8	134.4	133.8	132.9	132.0	131.1	130.2	129.1
77.5°	102.9	102.3	101.6	101.0	100.4	100.0	99.6	99.2	98.9	98.5	98.0
80°	80.9	80.7	80.5	80.3	80.2	79.9	79.5	79.1	78.8	78.4	77.9
82.5°	60.2	60.1	60.1	60.0	60.0	59.9	59.7	59.5	59.3	59.0	58.4
85°	33.2	33.0	32.8	32.6	32.4	32.2	32.1	31.9	31.7	31.5	31.0
87.5°	11.8	12.0	12.0	12.2	12.4	12.7	13.2	13.6	14.1	14.6	14.1
90°	0.8	2.9	5.0	7.1	9.2	12.2	16.1	20.0	23.8	27.6	27.3
92.5°	14.1	15.6	17.2	18.7	20.3	21.5	22.4	23.3	24.2	25.1	25.2
95°	41.1	42.9	44.6	46.3	48.2	49.2	49.5	49.9	50.2	50.6	50.6
97.5°	75.1	76.7	78.2	79.8	81.3	82.4	83.1	83.7	84.4	85.1	85.1
100°	100.4	101.8	103.2	104.6	106.0	107.0	107.5	108.1	108.6	109.1	109.1
102.5°	127.0	128.1	129.2	130.3	131.4	132.4	133.0	133.7	134.4	135.1	135.1
105°	170.0	170.5	171.0	171.6	172.1	172.5	172.9	173.3	173.6	173.9	174.3
107.5°	213.3	214.0	214.8	215.6	216.4	216.7	216.7	216.7	216.7	216.7	216.9
110°	241.1	242.2	243.2	244.3	245.3	245.9	245.9	245.9	245.9	245.9	245.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	271.5	272.5	273.6	274.6	275.7	276.2	276.0	275.8	275.8	275.6	275.2
115°	316.2	317.3	318.3	319.4	320.4	320.8	320.4	320.1	319.7	319.4	319.2
117.5°	360.8	362.2	363.6	365.0	366.5	366.6	365.7	364.6	363.7	362.7	362.3
120°	390.5	392.0	393.3	394.7	396.2	396.2	394.7	393.3	392.0	390.5	390.5
122.5°	417.7	419.4	421.1	422.8	424.5	424.8	423.8	422.9	421.9	420.9	420.5
125°	460.1	461.7	463.3	464.9	466.4	467.0	466.4	465.9	465.4	464.9	464.3
127.5°	501.4	503.4	505.4	507.4	509.4	510.1	509.5	508.8	508.2	507.6	506.9
130°	527.3	529.6	531.9	534.2	536.5	537.4	537.0	536.7	536.4	536.0	535.7
132.5°	556.4	558.3	560.2	562.0	563.9	564.8	564.9	565.0	565.0	565.1	564.4
135°	595.3	597.2	599.1	601.1	603.0	604.2	604.5	604.8	605.2	605.5	605.4
137.5°	636.3	637.8	639.4	641.0	642.5	643.6	644.0	644.5	645.0	645.4	645.3
140°	660.9	662.5	664.1	665.7	667.3	668.4	669.3	670.2	671.1	672.0	672.0
142.5°	686.2	687.8	689.4	690.9	692.5	693.6	694.2	694.8	695.4	696.0	696.2
145°	722.5	723.8	725.0	726.3	727.5	728.6	729.7	730.7	731.8	732.8	733.0
147.5°	754.9	756.5	758.0	759.4	760.9	762.0	762.7	763.3	764.1	764.8	765.2
150°	777.1	778.2	779.2	780.3	781.3	782.2	782.9	783.6	784.3	785.1	785.5
152.5°	796.7	797.8	798.8	799.9	801.0	801.9	802.7	803.6	804.4	805.3	806.0
155°	826.2	826.6	827.2	827.8	828.2	828.8	829.3	829.8	830.4	830.8	831.8
157.5°	851.3	851.6	852.0	852.3	852.7	853.0	853.3	853.7	854.0	854.3	855.5
160°	866.5	866.8	867.1	867.5	867.8	868.2	868.3	868.5	868.6	868.8	869.9
162.5°	880.4	880.4	880.5	880.6	880.7	880.7	881.0	881.1	881.3	881.5	882.6
165°	898.9	898.7	898.5	898.3	898.2	898.1	898.1	898.1	898.1	898.1	899.3
167.5°	914.3	913.9	913.3	912.8	912.3	912.0	912.0	911.9	911.9	911.8	913.1
170°	922.6	922.0	921.5	921.0	920.4	920.1	920.0	919.8	919.6	919.4	920.7
172.5°	928.3	927.7	927.2	926.7	926.1	925.8	925.7	925.4	925.3	925.1	926.4
175°	935.3	934.7	934.1	933.7	933.1	932.7	932.3	932.0	931.6	931.3	932.5
177.5°	938.1	937.6	937.2	936.8	936.4	936.0	935.7	935.5	935.2	934.9	935.7
180°	936.8	936.8	936.8	936.8	936.8	936.8	936.8	936.8	936.8	936.8	936.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	841.1	841.1	841.1	841.1	841.1	841.1	841.1	841.1
2.5°	837.4	838.9	840.3	840.9	840.6	840.3	840.0	839.8
5°	831.8	833.2	834.6	835.2	834.9	834.5	834.2	833.8
7.5°	822.4	823.9	825.3	825.8	825.4	825.1	824.7	824.3
10°	814.0	815.5	816.9	817.3	816.8	816.3	815.7	815.2
12.5°	804.1	805.1	806.1	806.4	806.0	805.6	805.3	804.9
15°	786.7	787.4	788.1	788.1	787.1	786.2	785.4	784.4
17.5°	766.0	766.8	767.7	767.7	766.8	766.0	765.1	764.2
20°	750.0	750.5	751.0	750.9	750.2	749.5	748.8	748.1
22.5°	732.9	733.0	733.1	732.9	732.5	732.1	731.7	731.3
25°	705.1	705.4	705.8	705.8	705.4	705.1	704.7	704.4
27.5°	677.7	677.2	676.7	676.0	675.1	674.2	673.4	672.5
30°	656.4	655.8	655.3	654.7	653.9	653.2	652.5	651.8
32.5°	635.5	634.5	633.5	632.7	632.0	631.3	630.5	629.8
35°	602.0	600.9	599.8	598.8	597.9	597.0	596.1	595.2
37.5°	568.3	567.0	565.6	564.5	563.6	562.8	562.0	561.1
40°	545.1	543.4	541.9	540.7	540.0	539.2	538.5	537.8
42.5°	522.1	520.4	518.6	517.2	516.2	515.2	514.2	513.2
45°	487.0	485.0	483.0	481.6	480.9	480.2	479.5	478.7
47.5°	450.4	448.2	446.2	444.6	443.5	442.5	441.5	440.5
50°	426.8	424.3	421.8	420.1	419.1	418.3	417.4	416.5
52.5°	402.4	400.4	398.3	396.6	395.5	394.3	393.1	391.9
55°	366.1	363.9	361.8	360.2	359.3	358.5	357.5	356.6
57.5°	328.3	326.1	324.1	322.7	321.9	321.3	320.6	319.9
60°	303.3	301.3	299.4	298.2	297.6	297.1	296.5	296.0
62.5°	279.7	277.9	276.1	274.8	274.1	273.4	272.7	272.0
65°	243.4	241.8	240.2	238.9	238.1	237.1	236.2	235.4
67.5°	207.6	206.4	205.1	204.1	203.4	202.6	201.9	201.2
70°	184.3	183.1	181.8	180.8	180.1	179.4	178.6	177.9
72.5°	162.3	161.1	159.8	158.8	158.3	157.7	157.2	156.5
75°	128.0	127.0	125.9	125.6	125.9	126.3	126.6	127.0
77.5°	97.4	96.9	96.3	95.9	95.3	94.8	94.3	93.8
80°	77.4	76.8	76.3	75.8	75.5	75.1	74.8	74.4
82.5°	57.7	57.0	56.3	55.9	55.8	55.8	55.7	55.6
85°	30.5	29.9	29.4	29.0	28.8	28.7	28.5	28.3
87.5°	13.6	13.1	12.6	12.3	12.2	12.0	12.0	11.9
90°	26.9	26.6	26.3	26.1	26.4	26.5	26.7	26.9
92.5°	25.3	25.3	25.4	25.5	25.5	25.5	25.6	25.6
95°	50.6	50.6	50.6	50.4	50.1	49.7	49.4	49.0
97.5°	85.1	85.1	85.1	85.1	85.0	85.0	84.9	84.9
100°	109.1	109.1	109.1	109.0	108.8	108.7	108.4	108.3
102.5°	135.3	135.5	135.6	135.5	135.4	135.2	135.1	134.9
105°	174.6	175.0	175.3	175.5	175.5	175.5	175.5	175.5
107.5°	217.1	217.2	217.3	217.0	216.2	215.4	214.6	213.7
110°	245.9	245.9	245.9	245.6	245.1	244.5	244.0	243.5



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CATALOG NUMBER: S122DIP-S675D925U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	274.7	274.3	273.9	273.5	273.1	272.7	272.4	272.0
115°	319.0	318.9	318.7	318.3	317.8	317.3	316.7	316.2
117.5°	361.9	361.5	361.0	360.5	360.0	359.5	358.9	358.5
120°	390.5	390.5	390.5	390.3	389.8	389.2	388.7	388.2
122.5°	420.0	419.6	419.2	418.8	418.4	418.0	417.6	417.2
125°	463.8	463.3	462.7	462.4	462.2	462.0	461.8	461.7
127.5°	506.3	505.6	505.0	504.4	503.8	503.3	502.7	502.2
130°	535.3	535.0	534.6	534.1	533.4	532.7	532.0	531.2
132.5°	563.6	562.8	562.0	561.3	560.8	560.2	559.7	559.1
135°	605.2	605.1	604.8	604.5	604.0	603.5	602.9	602.4
137.5°	645.2	645.0	644.8	644.4	643.7	643.0	642.3	641.6
140°	672.0	672.0	672.0	671.6	670.9	670.2	669.6	668.8
142.5°	696.3	696.4	696.6	696.3	695.6	694.9	694.2	693.5
145°	733.2	733.4	733.6	733.3	732.6	731.9	731.2	730.5
147.5°	765.6	766.0	766.4	766.2	765.6	764.9	764.2	763.5
150°	786.1	786.6	787.1	787.1	786.6	786.1	785.5	785.1
152.5°	806.6	807.2	807.9	807.9	807.2	806.6	806.0	805.3
155°	832.7	833.5	834.4	834.6	834.0	833.5	833.0	832.4
157.5°	856.7	857.9	859.0	859.2	858.4	857.5	856.7	855.9
160°	870.9	872.0	873.1	873.2	872.5	871.8	871.1	870.4
162.5°	883.8	885.0	886.2	886.5	885.6	884.7	883.9	883.0
165°	900.6	901.7	903.0	903.2	902.3	901.4	900.6	899.7
167.5°	914.3	915.5	916.7	916.9	916.0	915.0	914.2	913.2
170°	921.9	923.1	924.3	924.4	923.4	922.3	921.2	920.2
172.5°	927.6	928.8	930.0	930.1	929.1	928.0	926.9	925.9
175°	933.7	934.9	936.2	936.3	935.3	934.1	933.1	932.1
177.5°	936.6	937.5	938.3	938.3	937.5	936.6	935.7	934.9
180°	936.8	936.8	936.8	936.8	936.8	936.8	936.8	936.8

(END OF REPORT)