

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: P332611-940

Luminaire Tested: **SA4XXDIP-C795D1035U940-4F0-1E-UDD-D1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332611-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C795D1035U940-4F0-1E-UDD-D1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6083.7 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: General Diffuse

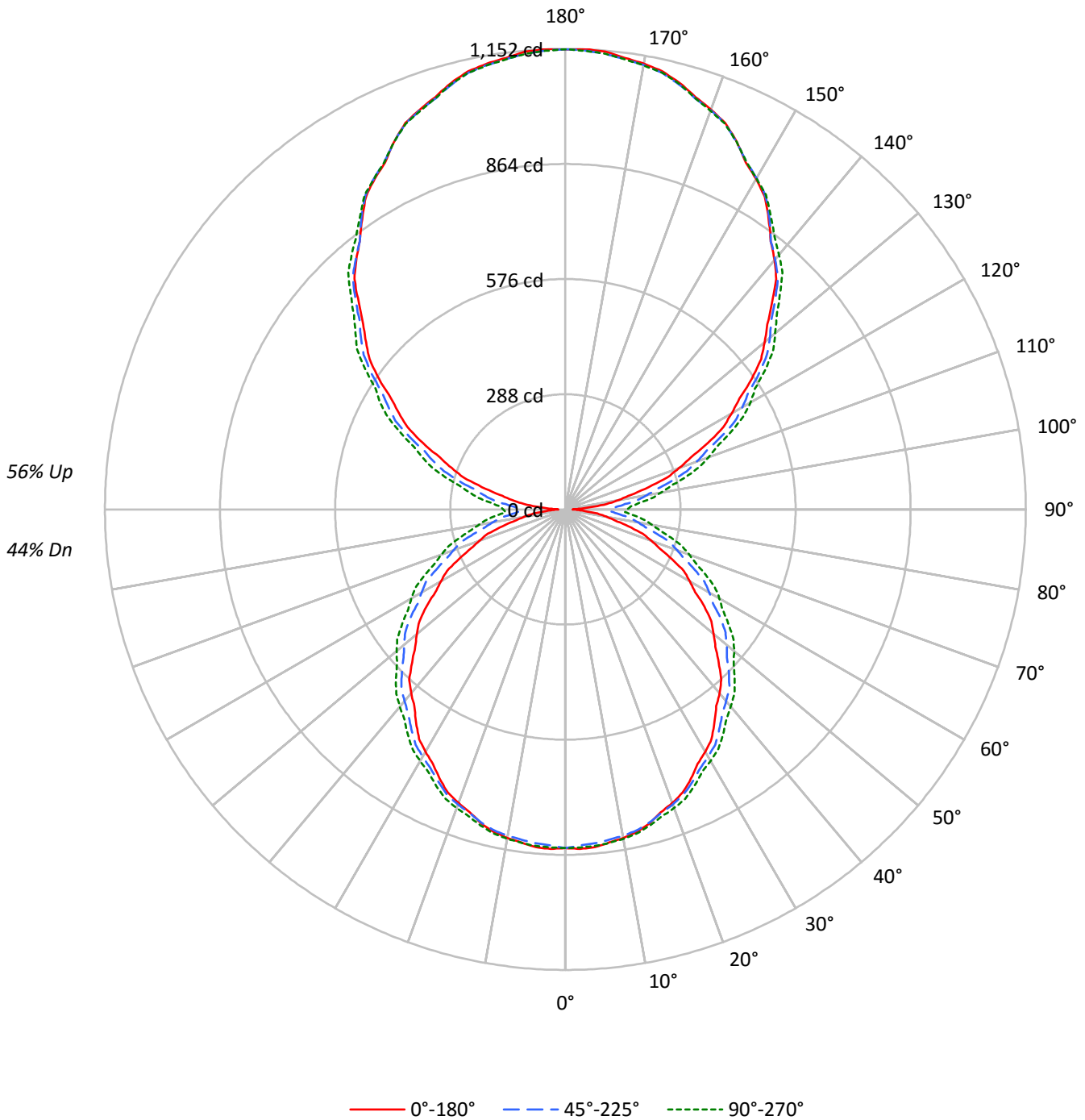
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	96	91	87	83	87	83	80	76	69	66	64	55	54	52	43	42	41	35				
2	87	79	72	67	79	72	67	62	60	56	52	48	45	43	38	35	34	29				
3	79	69	61	55	72	63	57	51	52	47	43	42	39	36	33	30	28	24				
4	72	61	53	46	65	56	49	43	46	41	37	37	33	30	29	26	24	20				
5	66	54	46	39	60	50	42	37	41	36	31	33	29	26	26	23	21	17				
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	24	21	18	15				
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	22	18	16	13				
8	52	39	31	26	47	36	29	24	30	25	21	25	21	18	20	17	14	12				
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13	11				
10	45	33	25	21	41	30	24	19	26	20	17	21	17	14	17	14	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6838	6838	6838
5°	6859	6683	6702
10°	6817	6573	6568
15°	6756	6446	6411
20°	6664	6307	6259
25°	6560	6151	6092
30°	6448	5995	5919
35°	6321	5835	5768
40°	6219	5684	5610
45°	6067	5543	5475
50°	5939	5383	5333
55°	5808	5231	5164
60°	5601	5036	5013
65°	5376	4829	4824
70°	5101	4592	4605
75°	4723	4331	4407
80°	4295	4081	4213
85°	3763	3857	4101



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.2	1.3
10°-20°	229.8	3.8
20°-30°	347.5	5.7
30°-40°	420.4	6.9
40°-50°	444.5	7.3
50°-60°	418.3	6.9
60°-70°	347.1	5.7
70°-80°	243.8	4.0
80°-90°	141.3	2.3
90°-100°	157.7	2.6
100°-110°	285.4	4.7
110°-120°	422.3	6.9
120°-130°	526.2	8.6
130°-140°	575.1	9.5
140°-150°	557.4	9.2
150°-160°	467.1	7.7
160°-170°	310.8	5.1
170°-180°	108.8	1.8
0°-30°	657.5	10.8
0°-40°	1077.9	17.7
0°-60°	1940.7	31.9
0°-90°	2672.8	43.9
90°-120°	865.5	14.2
90°-150°	2524.1	41.5
90°-180°	3411.0	56.1
0°-180°	6083.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	848	845	838	846	845	80
15°	813	814	811	819	818	229
25°	744	749	752	762	764	342
35°	651	662	672	684	688	407
45°	542	561	578	594	599	419
55°	425	445	473	492	498	378
65°	294	324	357	379	388	291
75°	163	198	238	264	273	174
85°	50	90	133	160	171	54
90°	18	66	114	145	156	13
95°	66	105	150	177	187	69
105°	216	237	274	300	311	230
115°	394	403	431	450	457	389
125°	569	569	591	606	611	507
135°	731	736	743	756	759	565
145°	886	889	890	895	896	555
155°	1015	1015	1014	1017	1014	467
165°	1105	1102	1100	1105	1102	311
175°	1149	1145	1144	1149	1144	109
180°	1151	1151	1151	1151	1151	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0
2.5°	850.1	849.5	849.0	848.6	848.0	847.1	845.7	844.4	843.0	841.7	842.8
5°	847.9	847.3	846.7	846.1	845.4	844.4	842.8	841.4	839.9	838.5	840.2
7.5°	840.7	840.3	840.0	839.6	839.2	838.4	837.2	836.0	834.7	833.6	835.4
10°	834.6	834.5	834.3	834.0	833.8	833.2	832.1	831.1	830.0	828.9	830.9
12.5°	826.3	826.3	826.3	826.2	826.2	825.8	825.1	824.3	823.6	822.9	824.7
15°	812.9	813.1	813.2	813.5	813.7	813.5	812.9	812.3	811.5	810.9	812.9
17.5°	794.4	795.0	795.7	796.4	797.0	797.2	797.1	797.0	796.8	796.7	798.7
20°	781.6	782.2	782.8	783.5	784.1	784.5	784.7	784.9	785.2	785.3	787.5
22.5°	767.1	767.9	768.7	769.5	770.3	771.0	771.3	771.7	772.0	772.5	774.5
25°	743.6	744.8	746.2	747.4	748.7	749.7	750.3	750.9	751.5	752.2	754.5
27.5°	717.5	719.3	721.1	723.0	724.9	726.3	727.3	728.2	729.2	730.1	732.3
30°	700.0	701.7	703.4	705.1	706.8	708.3	709.8	711.2	712.7	714.2	716.5
32.5°	681.0	683.1	685.1	687.1	689.1	690.9	692.6	694.2	695.9	697.5	700.2
35°	650.7	653.2	655.8	658.3	660.8	663.1	665.2	667.4	669.4	671.5	674.5
37.5°	620.1	623.0	626.0	628.8	631.8	634.5	637.1	639.7	642.4	645.0	648.0
40°	600.4	603.2	605.8	608.6	611.4	614.2	617.2	620.1	623.0	626.0	629.2
42.5°	577.7	580.7	583.8	586.8	590.0	593.2	596.6	600.1	603.6	607.0	610.6
45°	542.5	546.5	550.5	554.6	558.6	562.6	566.6	570.6	574.5	578.5	582.2
47.5°	509.0	513.1	517.2	521.4	525.5	529.9	534.5	539.1	543.8	548.4	552.1
50°	484.6	489.3	493.9	498.6	503.2	507.8	512.5	517.1	521.7	526.4	530.7
52.5°	460.4	465.0	469.7	474.3	478.9	483.9	489.2	494.5	499.9	505.2	509.3
55°	424.9	429.4	433.8	438.2	442.6	448.0	454.3	460.7	467.0	473.3	477.5
57.5°	385.3	390.7	396.3	401.7	407.2	413.0	419.4	425.6	431.9	438.2	443.2
60°	359.4	365.0	370.4	375.9	381.4	387.6	394.6	401.5	408.5	415.4	420.3
62.5°	334.4	340.5	346.4	352.4	358.4	364.9	371.8	378.8	385.8	392.7	397.5
65°	294.0	300.8	307.6	314.2	321.0	328.0	335.1	342.3	349.5	356.6	361.9
67.5°	255.1	262.3	269.5	276.6	283.8	291.2	298.9	306.6	314.2	321.9	327.3
70°	228.5	235.8	242.9	250.1	257.3	264.8	272.9	280.9	288.8	296.9	302.6
72.5°	202.8	210.1	217.5	224.8	232.1	240.0	248.6	257.1	265.6	274.1	279.6
75°	163.2	170.9	178.7	186.5	194.3	202.7	211.5	220.3	229.3	238.1	244.0
77.5°	126.2	134.4	142.7	151.0	159.2	168.0	177.3	186.5	195.8	205.1	211.1
80°	103.3	111.8	120.2	128.7	137.1	146.0	155.2	164.5	173.8	183.1	189.4
82.5°	80.6	89.3	98.2	106.9	115.7	124.8	134.0	143.3	152.6	161.8	168.3
85°	50.3	59.1	67.9	76.9	85.7	94.9	104.3	113.8	123.3	132.8	139.1
87.5°	28.6	37.6	46.6	55.7	64.7	74.0	83.6	93.1	102.7	112.3	118.6
90°	17.8	28.4	39.1	49.7	60.3	70.9	81.5	92.2	102.8	113.5	120.7
92.5°	33.4	43.5	53.6	63.7	73.7	83.9	94.1	104.2	114.4	124.6	131.3
95°	65.7	74.5	83.2	91.9	100.7	110.0	120.1	130.1	140.2	150.2	156.4
97.5°	104.5	111.9	119.3	126.7	134.1	142.9	153.1	163.3	173.4	183.6	189.8
100°	135.0	141.3	147.6	153.8	160.2	168.3	178.3	188.2	198.2	208.3	214.4
102.5°	167.8	172.9	178.1	183.2	188.2	195.6	205.4	215.0	224.7	234.3	240.5
105°	215.9	220.3	224.7	229.2	233.5	240.0	248.7	257.3	265.8	274.5	280.3
107.5°	268.2	272.0	275.6	279.3	283.0	288.6	296.1	303.6	311.1	318.6	324.3
110°	303.1	306.4	309.8	313.1	316.5	321.7	329.0	336.1	343.3	350.4	354.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	339.4	342.1	344.7	347.4	350.1	354.8	361.5	368.2	374.9	381.6	386.1
115°	393.8	395.7	397.5	399.5	401.4	405.5	411.8	418.1	424.5	430.9	435.3
117.5°	445.9	447.2	448.5	449.8	451.1	454.8	460.7	466.7	472.8	478.8	482.5
120°	480.0	481.4	482.9	484.3	485.7	489.2	494.7	500.2	505.8	511.3	514.5
122.5°	516.3	516.7	517.2	517.6	518.1	521.1	526.6	532.1	537.6	543.1	546.6
125°	569.0	568.7	568.6	568.4	568.1	570.6	575.6	580.7	585.8	590.8	594.4
127.5°	617.4	617.8	618.1	618.5	618.9	621.0	624.7	628.4	632.1	635.9	639.3
130°	650.8	651.2	651.6	651.9	652.4	654.2	657.5	660.9	664.3	667.7	671.1
132.5°	685.7	685.9	686.2	686.3	686.6	688.0	690.5	693.0	695.6	698.1	701.3
135°	730.8	732.0	733.3	734.4	735.6	736.9	738.4	739.9	741.4	742.8	745.8
137.5°	781.0	781.4	781.8	782.1	782.4	783.1	784.2	785.2	786.2	787.2	789.8
140°	814.5	814.7	814.8	815.0	815.3	815.5	815.6	815.8	816.1	816.3	818.9
142.5°	844.4	844.7	845.1	845.4	845.8	845.8	845.5	845.3	845.0	844.7	847.0
145°	886.5	887.2	887.7	888.3	888.9	889.2	889.5	889.7	889.8	890.0	891.1
147.5°	928.5	929.3	930.1	930.8	931.5	931.8	931.7	931.5	931.3	931.2	931.2
150°	954.2	954.8	955.4	955.9	956.5	956.8	956.8	956.8	956.8	956.8	956.8
152.5°	977.7	978.1	978.5	978.9	979.4	979.6	979.8	980.0	980.2	980.3	980.8
155°	1014.7	1014.7	1014.7	1014.7	1014.7	1014.6	1014.3	1014.1	1014.0	1013.8	1014.6
157.5°	1046.0	1045.6	1045.3	1044.9	1044.6	1044.4	1044.3	1044.3	1044.3	1044.2	1044.8
160°	1064.5	1064.3	1064.1	1063.9	1063.7	1063.5	1063.3	1063.1	1062.9	1062.7	1063.3
162.5°	1081.6	1081.1	1080.6	1080.0	1079.5	1079.1	1079.0	1078.8	1078.6	1078.3	1079.4
165°	1104.6	1103.9	1103.4	1102.8	1102.2	1101.7	1101.3	1100.9	1100.5	1100.1	1101.3
167.5°	1122.2	1121.3	1120.5	1119.7	1118.8	1118.5	1118.5	1118.6	1118.6	1118.7	1119.8
170°	1132.1	1131.1	1130.2	1129.2	1128.2	1127.7	1128.0	1128.2	1128.4	1128.5	1129.8
172.5°	1139.2	1138.4	1137.6	1136.8	1136.0	1135.5	1135.6	1135.6	1135.7	1135.7	1137.0
175°	1149.1	1148.1	1147.1	1146.1	1145.1	1144.5	1144.3	1144.1	1143.9	1143.7	1145.1
177.5°	1152.3	1151.5	1150.7	1149.9	1149.1	1148.7	1148.7	1148.7	1148.7	1148.7	1149.8
180°	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0
2.5°	844.0	845.3	846.4	846.9	846.8	846.6	846.4	846.2
5°	841.9	843.6	845.2	846.0	845.7	845.5	845.3	845.1
7.5°	837.3	839.2	841.2	842.0	841.8	841.5	841.3	841.2
10°	832.8	834.6	836.6	837.4	837.2	837.0	836.8	836.6
12.5°	826.3	828.1	829.8	830.6	830.6	830.5	830.5	830.5
15°	814.8	816.6	818.5	819.4	819.2	818.9	818.8	818.5
17.5°	800.6	802.5	804.5	805.4	805.2	805.0	804.9	804.7
20°	789.5	791.7	793.8	794.9	794.9	794.9	794.9	794.9
22.5°	776.7	778.7	780.9	782.1	782.5	782.7	783.1	783.5
25°	756.8	759.1	761.4	762.7	762.9	763.1	763.3	763.6
27.5°	734.4	736.6	738.8	739.9	740.2	740.5	740.7	740.9
30°	718.8	721.1	723.4	724.9	725.3	725.7	726.1	726.6
32.5°	702.8	705.5	708.1	709.7	710.1	710.5	711.0	711.4
35°	677.4	680.4	683.3	685.1	685.7	686.3	687.1	687.7
37.5°	650.9	654.0	656.9	658.8	659.4	660.1	660.8	661.5
40°	632.3	635.5	638.6	640.6	641.5	642.3	643.2	644.0
42.5°	614.0	617.5	621.0	623.1	623.8	624.5	625.2	625.8
45°	585.8	589.3	592.9	595.2	596.3	597.4	598.4	599.4
47.5°	555.8	559.5	563.3	565.7	567.0	568.3	569.5	570.8
50°	534.8	539.0	543.2	546.0	547.2	548.6	549.8	551.1
52.5°	513.6	517.8	522.0	524.8	526.0	527.3	528.5	529.9
55°	481.7	486.0	490.2	492.9	494.2	495.4	496.7	497.9
57.5°	448.3	453.3	458.3	461.4	462.5	463.7	464.9	466.1
60°	425.2	430.0	434.8	438.1	439.8	441.5	443.2	444.9
62.5°	402.3	407.2	412.1	415.4	417.1	418.7	420.4	422.0
65°	367.2	372.5	377.7	381.2	382.9	384.6	386.2	387.9
67.5°	332.6	338.0	343.3	346.8	348.5	350.1	351.8	353.4
70°	308.3	314.0	319.7	323.2	324.7	326.2	327.6	329.1
72.5°	285.2	290.7	296.2	299.8	301.4	303.1	304.7	306.4
75°	249.9	255.7	261.7	265.6	267.5	269.4	271.3	273.1
77.5°	217.0	223.0	229.0	233.0	235.1	237.0	239.1	241.1
80°	195.7	202.1	208.4	212.3	214.0	215.7	217.4	219.1
82.5°	174.8	181.3	187.8	192.0	193.8	195.6	197.5	199.4
85°	145.4	151.8	158.1	162.3	164.4	166.5	168.6	170.8
87.5°	124.9	131.3	137.6	141.8	143.7	145.6	147.6	149.5
90°	128.0	135.4	142.7	147.4	149.5	151.5	153.6	155.7
92.5°	137.9	144.5	151.2	155.5	157.4	159.3	161.3	163.2
95°	162.7	169.0	175.3	179.4	181.3	183.2	185.1	187.0
97.5°	196.1	202.3	208.6	212.6	214.4	216.2	218.0	219.8
100°	220.4	226.5	232.6	236.4	237.9	239.3	240.9	242.3
102.5°	246.6	252.6	258.7	262.6	264.4	266.3	268.0	269.8
105°	286.1	292.0	297.9	301.9	304.3	306.5	308.8	311.0
107.5°	330.1	335.8	341.5	345.2	346.6	348.1	349.6	351.1
110°	359.4	363.8	368.3	371.7	373.9	376.2	378.4	380.8



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CATALOG NUMBER: SA4XXDIP-C795D1035U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	390.7	395.4	399.9	403.1	404.9	406.8	408.6	410.4
115°	439.7	444.2	448.6	451.5	452.7	454.1	455.3	456.6
117.5°	486.2	489.9	493.6	496.1	497.4	498.6	500.0	501.2
120°	517.7	520.9	524.1	526.8	528.9	531.0	533.1	535.1
122.5°	550.2	553.7	557.2	559.5	560.3	561.1	561.9	562.7
125°	598.1	601.6	605.3	607.5	608.4	609.3	610.1	611.0
127.5°	642.7	646.0	649.5	651.8	652.8	654.0	655.1	656.2
130°	674.5	677.9	681.3	683.2	683.7	684.2	684.7	685.1
132.5°	704.6	707.8	711.1	713.1	714.1	715.1	716.0	716.9
135°	748.8	751.8	754.7	756.5	757.2	757.9	758.6	759.2
137.5°	792.4	795.0	797.5	799.3	800.5	801.7	802.9	804.1
140°	821.4	823.9	826.4	828.1	829.0	829.9	830.7	831.6
142.5°	849.4	851.8	854.2	855.8	856.6	857.5	858.3	859.2
145°	892.2	893.2	894.3	895.0	895.2	895.5	895.7	896.0
147.5°	931.2	931.2	931.2	931.5	931.9	932.4	932.9	933.4
150°	956.8	956.8	956.8	956.7	956.5	956.3	956.1	955.9
152.5°	981.2	981.7	982.2	982.2	981.7	981.1	980.6	980.1
155°	1015.4	1016.1	1016.9	1016.9	1016.1	1015.4	1014.6	1013.8
157.5°	1045.4	1046.0	1046.6	1046.5	1045.9	1045.2	1044.6	1043.8
160°	1063.9	1064.5	1065.1	1064.9	1063.9	1062.9	1061.9	1061.0
162.5°	1080.5	1081.6	1082.6	1082.7	1081.7	1080.8	1079.8	1078.7
165°	1102.5	1103.7	1104.8	1105.0	1104.3	1103.5	1102.7	1101.9
167.5°	1121.0	1122.2	1123.4	1123.4	1122.1	1120.9	1119.6	1118.5
170°	1131.0	1132.1	1133.4	1133.2	1131.8	1130.4	1129.1	1127.7
172.5°	1138.4	1139.7	1141.1	1141.0	1139.7	1138.3	1136.9	1135.5
175°	1146.5	1147.9	1149.2	1149.2	1147.9	1146.5	1145.1	1143.7
177.5°	1150.9	1152.0	1153.2	1153.1	1151.8	1150.5	1149.2	1148.0
180°	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8	1150.8

(END OF REPORT)