

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: P332583-940

Luminaire Tested: **S124DIP-S795D365U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332583-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S795D365U940-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4191.9 lumens
Efficiency: N/A
Efficacy: 119.8 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: Semi-Direct

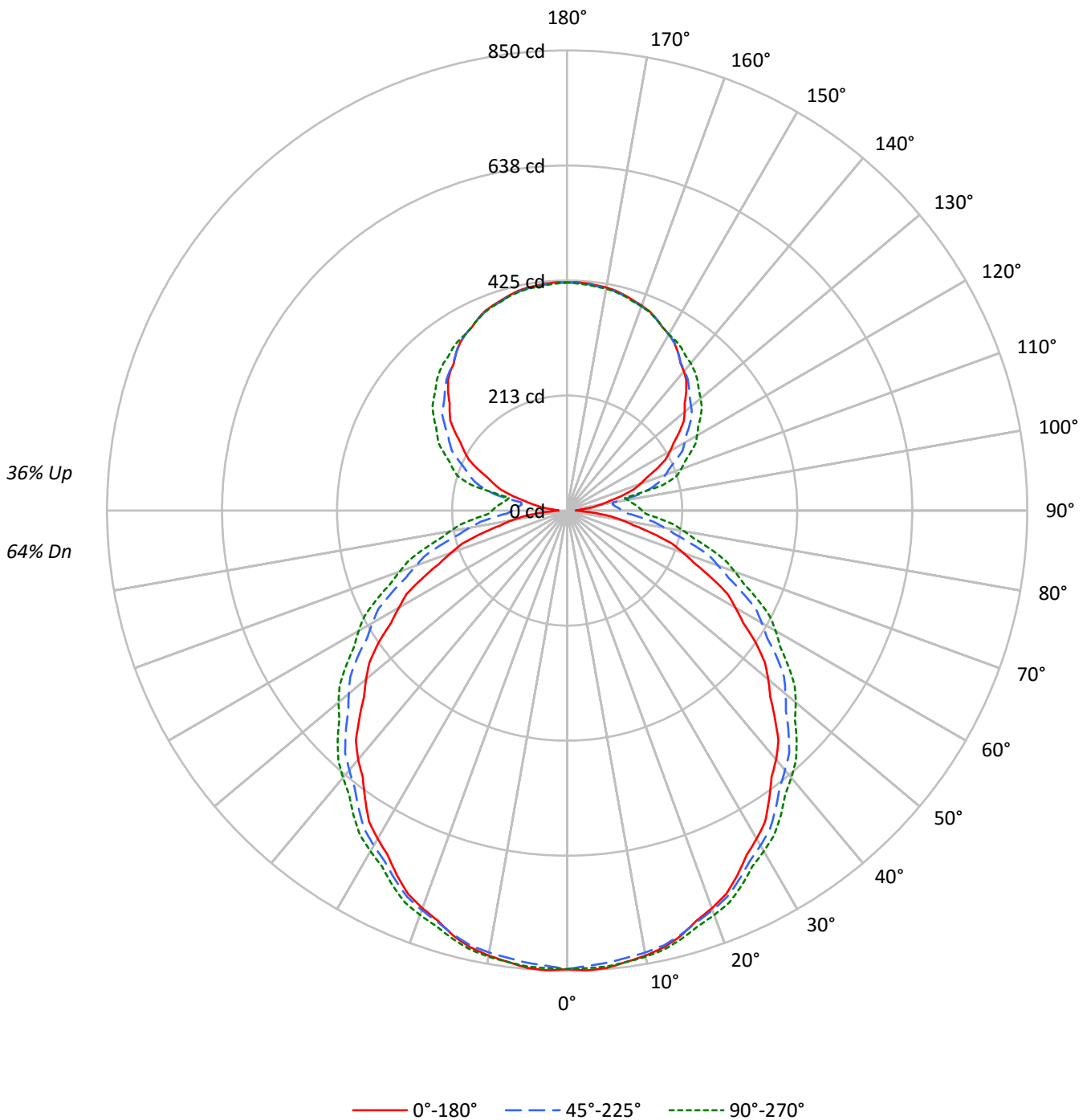
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P332583-940

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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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64
1	100	95	90	86	93	89	85	81	78	75	72	68	66	64	59	57	55	51
2	90	82	75	69	84	77	71	66	68	63	59	59	55	52	51	48	46	42
3	82	72	64	57	76	67	60	54	59	53	49	52	47	43	45	41	38	35
4	75	63	55	48	70	59	52	46	52	46	41	46	41	37	40	36	33	29
5	69	56	47	41	64	53	45	39	47	40	35	41	36	32	36	31	28	25
6	63	50	42	35	59	47	40	34	42	36	31	37	32	28	32	28	25	22
7	58	45	37	31	54	43	35	30	38	32	27	34	28	24	29	25	22	19
8	54	41	33	27	51	39	31	26	35	28	24	31	25	22	27	23	19	17
9	50	38	30	24	47	36	28	23	32	26	21	28	23	19	25	21	18	15
10	47	34	27	22	44	33	26	21	29	23	19	26	21	18	23	19	16	14

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	1.9
10°-20°	229.8	5.5
20°-30°	347.5	8.3
30°-40°	420.4	10.0
40°-50°	444.5	10.6
50°-60°	418.3	10.0
60°-70°	347.1	8.3
70°-80°	243.8	5.8
80°-90°	139.0	3.3
90°-100°	96.2	2.3
100°-110°	152.5	3.6
110°-120°	216.4	5.2
120°-130°	246.1	5.9
130°-140°	248.7	5.9
140°-150°	225.2	5.4
150°-160°	180.0	4.3
160°-170°	116.1	2.8
170°-180°	40.0	1.0
0°-30°	657.5	15.7
0°-40°	1077.9	25.7
0°-60°	1940.7	46.3
0°-90°	2670.6	63.7
90°-120°	465.1	11.1
90°-150°	1185.1	28.3
90°-180°	1521.0	36.3
0°-180°	4191.9	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	53
90°	16	58	101	129	138	11
95°	30	51	89	116	126	32
105°	103	125	161	186	184	109
115°	183	193	222	243	250	180
125°	253	254	276	294	301	226
135°	311	311	318	334	340	240
145°	357	357	357	363	368	223
155°	390	391	390	391	390	180
165°	412	410	410	413	410	116
175°	421	420	420	422	419	40
180°	421	421	421	421	421	



TEST NUMBER: P332583-940

CATALOG NUMBER: S124DIP-S795D365U940-4F0-1E-UDD-D

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°	28.3	37.0	45.7	54.5	63.3	72.3	81.7	91.0	100.3	109.7	115.9
90°	16.1	25.3	34.5	43.7	53.0	62.3	72.0	81.6	91.2	100.9	107.4
92.5°	18.4	26.0	33.6	41.3	48.9	57.5	67.1	76.8	86.4	96.0	102.4
95°	29.7	34.2	38.8	43.4	48.0	54.6	63.3	72.1	80.7	89.4	95.6
97.5°	48.0	55.5	63.0	70.4	77.8	81.9	82.8	83.5	84.2	85.0	90.5
100°	62.2	68.8	75.6	82.3	89.1	91.8	90.2	88.8	87.4	86.0	90.4
102.5°	78.7	84.4	90.2	95.9	101.7	107.9	114.8	121.5	128.3	135.1	127.8
105°	103.4	108.0	112.6	117.3	121.9	128.3	136.5	144.6	152.8	161.0	166.8
107.5°	127.9	131.5	135.2	138.8	142.5	148.3	156.1	164.0	171.8	179.7	185.2
110°	143.7	146.9	150.1	153.2	156.4	161.8	169.7	177.5	185.2	193.1	198.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	159.1	162.1	165.1	168.1	171.0	176.2	183.4	190.6	197.9	205.1	209.8
115°	182.8	184.9	187.0	189.1	191.3	195.6	202.3	208.9	215.6	222.3	227.1
117.5°	205.0	206.4	207.9	209.3	210.6	214.5	221.1	227.5	233.9	240.3	244.7
120°	219.4	220.3	221.1	222.1	223.0	226.5	232.6	238.5	244.6	250.7	255.0
122.5°	233.4	233.8	234.1	234.3	234.6	237.7	243.6	249.5	255.4	261.3	265.6
125°	252.8	252.8	252.9	253.0	253.1	255.7	260.7	265.9	271.0	276.2	280.4
127.5°	271.7	271.6	271.4	271.3	271.2	273.3	277.7	282.0	286.4	290.8	294.5
130°	283.3	283.2	283.0	282.9	282.8	284.5	288.0	291.7	295.2	298.8	302.6
132.5°	294.7	294.6	294.5	294.4	294.4	295.8	298.7	301.7	304.7	307.6	311.3
135°	310.8	310.7	310.6	310.5	310.5	311.3	313.1	314.8	316.6	318.3	321.8
137.5°	325.8	325.7	325.5	325.3	325.0	325.5	326.5	327.5	328.6	329.6	332.8
140°	335.6	335.6	335.5	335.5	335.4	335.5	335.8	336.2	336.5	336.9	339.8
142.5°	343.7	343.9	344.1	344.3	344.6	344.6	344.6	344.6	344.5	344.5	347.0
145°	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	357.0	358.4
147.5°	367.8	368.0	368.2	368.4	368.5	368.6	368.5	368.5	368.4	368.4	368.5
150°	375.7	375.7	375.8	375.9	375.9	375.9	375.9	375.8	375.7	375.7	375.7
152.5°	381.5	381.7	381.8	382.0	382.2	382.2	382.1	381.9	381.8	381.7	381.8
155°	390.5	390.6	390.6	390.7	390.7	390.7	390.5	390.2	390.0	389.9	390.1
157.5°	398.2	398.1	398.1	398.1	398.1	397.9	397.7	397.4	397.2	397.0	397.3
160°	402.8	402.5	402.3	402.2	401.9	401.8	401.7	401.6	401.5	401.4	401.9
162.5°	406.8	406.5	406.3	406.0	405.7	405.6	405.5	405.4	405.4	405.3	405.7
165°	411.9	411.5	411.2	410.8	410.5	410.3	410.3	410.3	410.3	410.3	410.9
167.5°	415.9	415.5	415.2	414.8	414.5	414.3	414.2	414.2	414.1	414.1	414.7
170°	418.2	417.8	417.3	417.0	416.5	416.3	416.4	416.5	416.5	416.6	417.1
172.5°	419.7	419.3	418.8	418.5	418.0	417.9	417.9	418.0	418.0	418.1	418.7
175°	421.3	420.9	420.5	420.1	419.6	419.5	419.5	419.6	419.7	419.7	420.4
177.5°	422.1	421.7	421.3	420.9	420.5	420.4	420.5	420.6	420.7	420.8	421.3
180°	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3



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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°	122.1	128.3	134.5	138.6	140.4	142.3	144.2	146.1
90°	113.9	120.5	127.0	131.2	133.0	134.8	136.6	138.5
92.5°	108.8	115.1	121.5	125.6	127.2	128.9	130.6	132.4
95°	101.7	107.8	113.9	118.0	119.9	121.9	123.9	125.8
97.5°	96.1	101.7	107.2	110.9	112.8	114.7	116.5	118.5
100°	95.0	99.4	104.0	107.0	108.5	110.0	111.6	113.2
102.5°	120.5	113.2	105.8	103.0	104.6	106.3	108.0	109.6
105°	172.7	178.6	184.5	187.1	186.2	185.4	184.6	183.7
107.5°	190.6	196.2	201.7	205.3	207.1	208.8	210.6	212.4
110°	203.0	208.0	213.0	216.4	218.3	220.3	222.1	224.0



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CATALOG NUMBER: S124DIP-S795D365U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	214.5	219.1	223.7	227.0	229.0	231.0	232.9	234.9
115°	231.8	236.7	241.4	244.6	246.0	247.5	249.0	250.5
117.5°	249.1	253.4	257.8	260.7	262.4	264.0	265.7	267.4
120°	259.4	263.7	268.0	271.0	272.6	274.1	275.6	277.2
122.5°	269.8	274.1	278.4	281.2	282.7	284.0	285.4	286.8
125°	284.5	288.8	293.0	295.8	297.1	298.5	299.8	301.1
127.5°	298.3	302.0	305.8	308.4	309.7	311.1	312.5	313.8
130°	306.6	310.4	314.2	316.8	318.1	319.3	320.7	321.9
132.5°	315.0	318.7	322.4	324.9	326.1	327.3	328.5	329.7
135°	325.4	328.9	332.3	334.8	336.3	337.6	339.0	340.5
137.5°	336.1	339.3	342.5	344.6	345.6	346.7	347.7	348.7
140°	342.8	345.7	348.7	350.7	351.9	352.9	354.1	355.3
142.5°	349.6	352.1	354.7	356.4	357.3	358.2	359.1	360.0
145°	359.7	361.1	362.4	363.6	364.5	365.5	366.5	367.5
147.5°	368.8	369.0	369.3	369.7	370.5	371.2	371.9	372.7
150°	375.7	375.7	375.7	375.7	375.8	375.9	375.9	375.9
152.5°	381.9	382.0	382.2	382.2	382.1	382.1	382.1	382.0
155°	390.4	390.7	390.9	391.0	390.7	390.6	390.4	390.1
157.5°	397.7	398.1	398.4	398.4	398.1	397.7	397.3	397.0
160°	402.3	402.8	403.1	403.1	402.8	402.3	401.9	401.4
162.5°	406.1	406.5	407.0	406.9	406.4	406.0	405.5	405.0
165°	411.4	412.0	412.6	412.5	411.9	411.3	410.6	410.0
167.5°	415.4	416.0	416.5	416.5	415.8	415.1	414.4	413.8
170°	417.8	418.3	418.8	418.7	418.1	417.4	416.7	416.0
172.5°	419.3	419.8	420.4	420.3	419.5	418.7	418.0	417.2
175°	421.1	421.7	422.3	422.2	421.3	420.5	419.6	418.8
177.5°	421.8	422.2	422.7	422.5	421.9	421.2	420.5	419.8
180°	421.3	421.3	421.3	421.3	421.3	421.3	421.3	421.3

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