

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: P332583-935

Luminaire Tested: **S124DIP-S795D365U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332583-935
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-S795D365U935-4F0-1E-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: 4047.5 lumens
Efficiency: N/A
Efficacy: 115.6 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

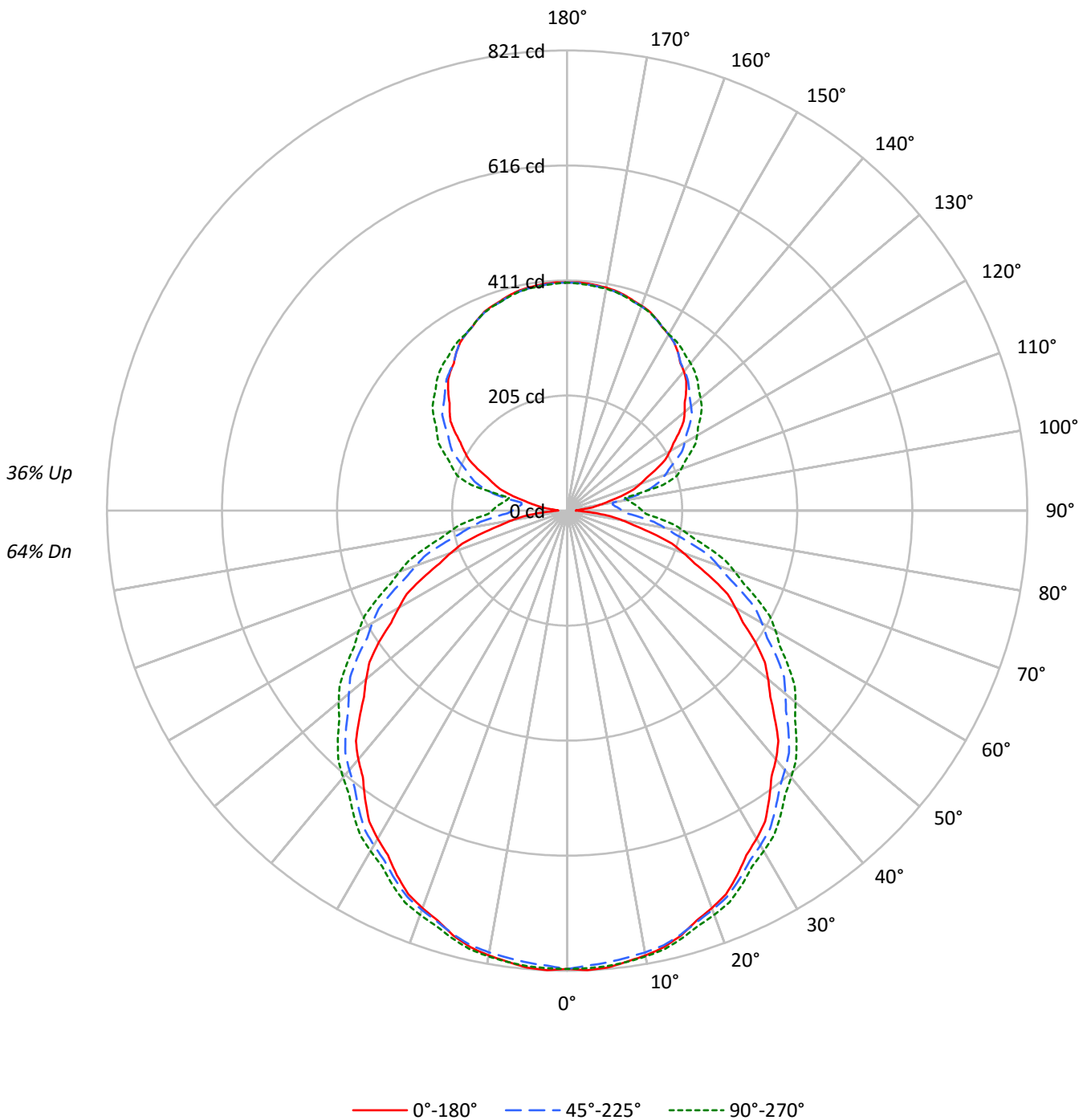
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P332583-935

CATALOG NUMBER: S124DIP-S795D365U935-4F0-1E-UDD-D

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°	6603	6603	6603
5°	6622	6453	6471
10°	6582	6347	6342
15°	6524	6225	6190
20°	6435	6090	6044
25°	6334	5939	5882
30°	6226	5788	5714
35°	6103	5635	5569
40°	6004	5488	5417
45°	5858	5352	5286
50°	5735	5197	5149
55°	5608	5051	4987
60°	5409	4863	4840
65°	5191	4662	4657
70°	4927	4433	4447
75°	4561	4182	4255
80°	4149	3940	4067
85°	3636	3724	3960



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	1.9
10°-20°	221.9	5.5
20°-30°	335.5	8.3
30°-40°	405.9	10.0
40°-50°	429.2	10.6
50°-60°	403.9	10.0
60°-70°	335.1	8.3
70°-80°	235.4	5.8
80°-90°	134.3	3.3
90°-100°	92.9	2.3
100°-110°	147.2	3.6
110°-120°	209.0	5.2
120°-130°	237.6	5.9
130°-140°	240.1	5.9
140°-150°	217.5	5.4
150°-160°	173.8	4.3
160°-170°	112.1	2.8
170°-180°	38.6	1.0
0°-30°	634.9	15.7
0°-40°	1040.8	25.7
0°-60°	1873.9	46.3
0°-90°	2578.6	63.7
90°-120°	449.1	11.1
90°-150°	1144.3	28.3
90°-180°	1469.0	36.3
0°-180°	4047.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	819	816	810	816	816	78
15°	785	786	783	791	790	221
25°	718	723	726	736	737	331
35°	628	639	648	661	664	393
45°	524	541	559	574	579	405
55°	410	430	457	475	481	365
65°	284	313	344	366	374	281
75°	158	192	230	255	264	168
85°	49	87	128	155	165	52
90°	16	56	97	125	134	10
95°	29	50	86	112	122	31
105°	100	121	155	179	177	105
115°	176	187	215	235	242	174
125°	244	246	267	284	291	218
135°	300	300	307	322	329	231
145°	345	345	345	350	355	215
155°	377	377	376	378	377	174
165°	398	396	396	398	396	112
175°	407	405	405	408	404	39
180°	407	407	407	407	407	



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CATALOG NUMBER: S124DIP-S795D365U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9
2.5°	820.8	820.3	819.8	819.3	818.8	817.9	816.6	815.3	814.0	812.7	813.8
5°	818.7	818.1	817.5	816.9	816.3	815.3	813.8	812.4	811.0	809.6	811.2
7.5°	811.8	811.4	811.1	810.7	810.3	809.5	808.4	807.2	806.0	804.9	806.7
10°	805.9	805.7	805.6	805.3	805.1	804.5	803.5	802.5	801.4	800.4	802.3
12.5°	797.9	797.8	797.8	797.7	797.7	797.4	796.7	795.9	795.2	794.5	796.3
15°	784.9	785.1	785.2	785.5	785.7	785.5	784.9	784.3	783.6	783.0	784.9
17.5°	767.1	767.7	768.3	769.0	769.6	769.7	769.6	769.6	769.4	769.3	771.2
20°	754.7	755.3	755.9	756.5	757.1	757.5	757.7	757.9	758.1	758.3	760.3
22.5°	740.7	741.5	742.3	743.0	743.8	744.4	744.8	745.1	745.5	745.9	747.9
25°	718.0	719.2	720.5	721.7	722.9	723.8	724.4	725.0	725.7	726.3	728.5
27.5°	692.8	694.5	696.3	698.1	699.9	701.3	702.2	703.1	704.0	705.0	707.1
30°	675.9	677.5	679.2	680.8	682.4	683.9	685.4	686.7	688.2	689.6	691.8
32.5°	657.5	659.5	661.5	663.4	665.4	667.1	668.7	670.3	671.9	673.5	676.1
35°	628.3	630.7	633.2	635.6	638.0	640.2	642.3	644.4	646.4	648.4	651.3
37.5°	598.7	601.6	604.4	607.2	610.0	612.7	615.2	617.7	620.3	622.8	625.7
40°	579.7	582.4	585.0	587.6	590.3	593.1	595.9	598.7	601.6	604.4	607.5
42.5°	557.8	560.7	563.7	566.6	569.6	572.7	576.1	579.5	582.8	586.1	589.5
45°	523.8	527.7	531.6	535.5	539.3	543.2	547.1	551.0	554.7	558.6	562.1
47.5°	491.5	495.4	499.4	503.4	507.4	511.6	516.1	520.6	525.0	529.5	533.1
50°	468.0	472.4	476.9	481.4	485.9	490.3	494.8	499.3	503.8	508.2	512.4
52.5°	444.5	449.0	453.5	458.0	462.4	467.3	472.3	477.5	482.7	487.8	491.8
55°	410.3	414.6	418.9	423.1	427.4	432.6	438.7	444.8	450.9	457.0	461.1
57.5°	372.0	377.3	382.6	387.9	393.1	398.8	404.9	411.0	417.1	423.1	427.9
60°	347.1	352.4	357.7	363.0	368.2	374.3	381.0	387.7	394.4	401.1	405.8
62.5°	322.9	328.7	334.5	340.3	346.0	352.3	359.0	365.8	372.5	379.2	383.8
65°	283.9	290.4	297.0	303.4	310.0	316.7	323.6	330.5	337.4	344.3	349.4
67.5°	246.3	253.3	260.2	267.1	274.1	281.2	288.6	296.0	303.4	310.8	316.0
70°	220.7	227.6	234.5	241.5	248.4	255.7	263.5	271.2	278.9	286.6	292.1
72.5°	195.8	202.9	210.0	217.1	224.1	231.8	240.0	248.2	256.5	264.7	270.0
75°	157.6	165.1	172.5	180.1	187.6	195.7	204.2	212.8	221.4	229.9	235.6
77.5°	121.8	129.8	137.8	145.8	153.7	162.2	171.2	180.1	189.1	198.0	203.8
80°	99.8	108.0	116.1	124.2	132.4	140.9	149.9	158.9	167.8	176.8	182.9
82.5°	77.8	86.3	94.8	103.2	111.7	120.5	129.4	138.4	147.3	156.3	162.5
85°	48.6	57.1	65.6	74.2	82.7	91.6	100.7	109.9	119.1	128.2	134.3
87.5°	27.3	35.7	44.2	52.6	61.1	69.8	78.9	87.9	96.9	105.9	111.9
90°	15.6	24.5	33.3	42.2	51.1	60.2	69.5	78.8	88.1	97.4	103.7
92.5°	17.7	25.1	32.5	39.9	47.2	55.5	64.8	74.1	83.4	92.7	98.8
95°	28.7	33.1	37.5	41.9	46.3	52.7	61.1	69.6	77.9	86.4	92.3
97.5°	46.3	53.6	60.8	68.0	75.2	79.1	79.9	80.6	81.3	82.1	87.4
100°	60.0	66.5	73.0	79.5	86.0	88.6	87.1	85.8	84.4	83.0	87.3
102.5°	76.0	81.5	87.1	92.6	98.2	104.2	110.8	117.4	123.9	130.4	123.4
105°	99.9	104.3	108.7	113.2	117.7	123.9	131.8	139.7	147.5	155.4	161.1
107.5°	123.5	127.0	130.5	134.1	137.6	143.2	150.8	158.3	165.9	173.5	178.8
110°	138.8	141.8	144.9	147.9	151.0	156.3	163.8	171.3	178.8	186.4	191.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	153.6	156.5	159.4	162.3	165.1	170.1	177.1	184.1	191.1	198.0	202.6
115°	176.5	178.6	180.6	182.6	184.7	188.9	195.4	201.7	208.2	214.6	219.3
117.5°	197.9	199.3	200.7	202.1	203.4	207.2	213.4	219.6	225.8	232.0	236.3
120°	211.8	212.7	213.5	214.5	215.3	218.7	224.5	230.3	236.2	242.0	246.2
122.5°	225.4	225.8	226.0	226.3	226.5	229.5	235.2	240.9	246.6	252.3	256.4
125°	244.1	244.1	244.2	244.3	244.4	246.8	251.8	256.8	261.7	266.7	270.7
127.5°	262.3	262.3	262.1	262.0	261.8	263.9	268.1	272.3	276.6	280.8	284.4
130°	273.5	273.5	273.3	273.2	273.0	274.7	278.1	281.6	285.1	288.5	292.2
132.5°	284.6	284.5	284.4	284.3	284.2	285.6	288.4	291.3	294.2	297.0	300.6
135°	300.1	300.0	299.9	299.8	299.8	300.6	302.3	303.9	305.7	307.4	310.7
137.5°	314.6	314.4	314.3	314.1	313.8	314.3	315.3	316.2	317.3	318.2	321.3
140°	324.1	324.0	323.9	323.9	323.8	323.9	324.3	324.6	324.9	325.3	328.1
142.5°	331.8	332.1	332.3	332.4	332.7	332.8	332.7	332.7	332.6	332.6	335.0
145°	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	346.0
147.5°	355.2	355.3	355.5	355.7	355.9	355.9	355.9	355.8	355.7	355.7	355.9
150°	362.7	362.7	362.8	362.9	363.0	363.0	362.9	362.8	362.7	362.7	362.7
152.5°	368.3	368.5	368.7	368.9	369.0	369.0	368.9	368.8	368.7	368.6	368.7
155°	377.0	377.1	377.1	377.2	377.3	377.2	377.0	376.8	376.6	376.4	376.7
157.5°	384.5	384.4	384.4	384.4	384.4	384.2	384.0	383.7	383.5	383.3	383.7
160°	388.9	388.7	388.5	388.3	388.1	388.0	387.9	387.8	387.7	387.6	388.1
162.5°	392.8	392.5	392.3	392.0	391.8	391.6	391.5	391.4	391.4	391.3	391.8
165°	397.7	397.4	397.0	396.7	396.3	396.1	396.1	396.1	396.1	396.1	396.7
167.5°	401.6	401.2	400.9	400.5	400.2	400.0	399.9	399.9	399.8	399.8	400.5
170°	403.8	403.4	402.9	402.6	402.2	402.0	402.1	402.2	402.2	402.3	402.8
172.5°	405.3	404.8	404.4	404.1	403.6	403.5	403.6	403.6	403.6	403.7	404.2
175°	406.8	406.4	406.0	405.6	405.2	405.0	405.1	405.2	405.3	405.3	406.0
177.5°	407.6	407.2	406.8	406.4	406.0	405.9	406.0	406.1	406.2	406.3	406.8
180°	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9
2.5°	814.9	816.1	817.3	817.8	817.6	817.4	817.3	817.1
5°	812.9	814.5	816.1	816.8	816.6	816.4	816.2	816.0
7.5°	808.5	810.3	812.2	813.0	812.8	812.5	812.4	812.2
10°	804.1	805.9	807.8	808.6	808.4	808.1	808.0	807.8
12.5°	797.9	799.6	801.2	802.0	802.0	801.9	801.9	801.8
15°	786.7	788.5	790.3	791.2	791.0	790.7	790.6	790.3
17.5°	773.0	774.9	776.8	777.7	777.5	777.3	777.1	777.0
20°	762.3	764.4	766.5	767.5	767.5	767.5	767.5	767.5
22.5°	749.9	751.9	754.0	755.2	755.5	755.8	756.1	756.5
25°	730.7	733.0	735.2	736.4	736.6	736.8	737.0	737.3
27.5°	709.1	711.2	713.3	714.5	714.7	715.0	715.2	715.4
30°	694.1	696.3	698.5	699.9	700.3	700.7	701.1	701.5
32.5°	678.6	681.2	683.7	685.3	685.6	686.0	686.5	686.9
35°	654.1	656.9	659.8	661.5	662.1	662.7	663.4	664.0
37.5°	628.5	631.5	634.3	636.1	636.7	637.4	638.0	638.7
40°	610.5	613.6	616.6	618.5	619.4	620.2	621.0	621.8
42.5°	592.9	596.2	599.6	601.7	602.3	603.0	603.6	604.2
45°	565.6	569.0	572.5	574.7	575.8	576.8	577.8	578.8
47.5°	536.7	540.3	543.9	546.2	547.5	548.7	549.9	551.1
50°	516.4	520.5	524.5	527.2	528.4	529.7	530.9	532.1
52.5°	495.9	500.0	504.0	506.7	507.9	509.1	510.3	511.6
55°	465.1	469.2	473.3	476.0	477.2	478.4	479.6	480.8
57.5°	432.8	437.6	442.5	445.5	446.6	447.7	448.9	450.0
60°	410.5	415.2	419.8	423.0	424.6	426.3	427.9	429.6
62.5°	388.5	393.2	397.9	401.1	402.7	404.3	405.9	407.5
65°	354.6	359.6	364.7	368.1	369.7	371.3	372.9	374.5
67.5°	321.2	326.3	331.5	334.8	336.5	338.0	339.7	341.2
70°	297.6	303.2	308.7	312.1	313.5	315.0	316.3	317.8
72.5°	275.3	280.7	286.0	289.5	291.0	292.7	294.2	295.8
75°	241.3	246.9	252.7	256.4	258.3	260.1	261.9	263.7
77.5°	209.6	215.3	221.1	225.0	227.0	228.9	230.8	232.8
80°	189.0	195.1	201.2	205.0	206.6	208.3	209.9	211.5
82.5°	168.8	175.0	181.3	185.4	187.1	188.9	190.7	192.5
85°	140.4	146.5	152.7	156.7	158.8	160.7	162.8	164.9
87.5°	117.9	123.9	129.8	133.8	135.6	137.4	139.2	141.0
90°	109.9	116.3	122.6	126.7	128.4	130.2	131.9	133.7
92.5°	105.0	111.2	117.3	121.2	122.9	124.5	126.1	127.9
95°	98.2	104.1	109.9	113.9	115.8	117.7	119.6	121.5
97.5°	92.8	98.2	103.5	107.1	108.9	110.7	112.5	114.4
100°	91.7	96.0	100.4	103.3	104.8	106.2	107.8	109.3
102.5°	116.3	109.3	102.2	99.4	101.0	102.6	104.3	105.8
105°	166.8	172.5	178.1	180.6	179.8	179.0	178.2	177.4
107.5°	184.1	189.4	194.8	198.2	199.9	201.6	203.4	205.1
110°	196.0	200.9	205.7	209.0	210.8	212.7	214.5	216.3



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CATALOG NUMBER: S124DIP-S795D365U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	207.1	211.5	216.0	219.2	221.1	223.0	224.9	226.8
115°	223.9	228.5	233.1	236.2	237.5	239.0	240.4	241.9
117.5°	240.5	244.7	248.9	251.8	253.4	254.9	256.6	258.2
120°	250.5	254.6	258.8	261.7	263.2	264.7	266.1	267.7
122.5°	260.5	264.7	268.8	271.6	272.9	274.2	275.6	276.9
125°	274.7	278.9	282.9	285.6	286.9	288.2	289.5	290.8
127.5°	288.0	291.6	295.2	297.7	299.0	300.4	301.7	303.0
130°	296.0	299.7	303.4	305.9	307.1	308.3	309.6	310.8
132.5°	304.2	307.7	311.3	313.7	314.9	316.0	317.2	318.3
135°	314.2	317.5	320.9	323.3	324.7	326.0	327.4	328.7
137.5°	324.5	327.6	330.7	332.8	333.7	334.8	335.7	336.7
140°	331.0	333.8	336.7	338.6	339.8	340.8	341.9	343.0
142.5°	337.5	340.0	342.5	344.1	345.0	345.9	346.7	347.6
145°	347.3	348.6	349.9	351.0	352.0	352.9	353.9	354.8
147.5°	356.1	356.3	356.5	357.0	357.7	358.4	359.1	359.9
150°	362.7	362.7	362.7	362.7	362.8	362.9	362.9	363.0
152.5°	368.8	368.9	369.0	369.0	368.9	368.9	368.9	368.9
155°	376.9	377.2	377.5	377.5	377.3	377.1	376.9	376.7
157.5°	384.0	384.4	384.7	384.7	384.4	384.0	383.7	383.3
160°	388.5	388.9	389.3	389.3	388.9	388.5	388.1	387.6
162.5°	392.1	392.5	393.0	392.9	392.4	392.0	391.5	391.1
165°	397.3	397.8	398.4	398.3	397.7	397.1	396.5	395.9
167.5°	401.1	401.7	402.2	402.2	401.5	400.8	400.1	399.5
170°	403.4	403.9	404.4	404.3	403.7	403.0	402.3	401.7
172.5°	404.8	405.4	405.9	405.8	405.1	404.3	403.6	402.9
175°	406.6	407.2	407.8	407.7	406.8	406.0	405.2	404.4
177.5°	407.3	407.7	408.1	407.9	407.3	406.7	406.0	405.4
180°	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8

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