

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: P333164-940

Luminaire Tested: **S125DIP-S610D365U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333164-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D365U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3271.4 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

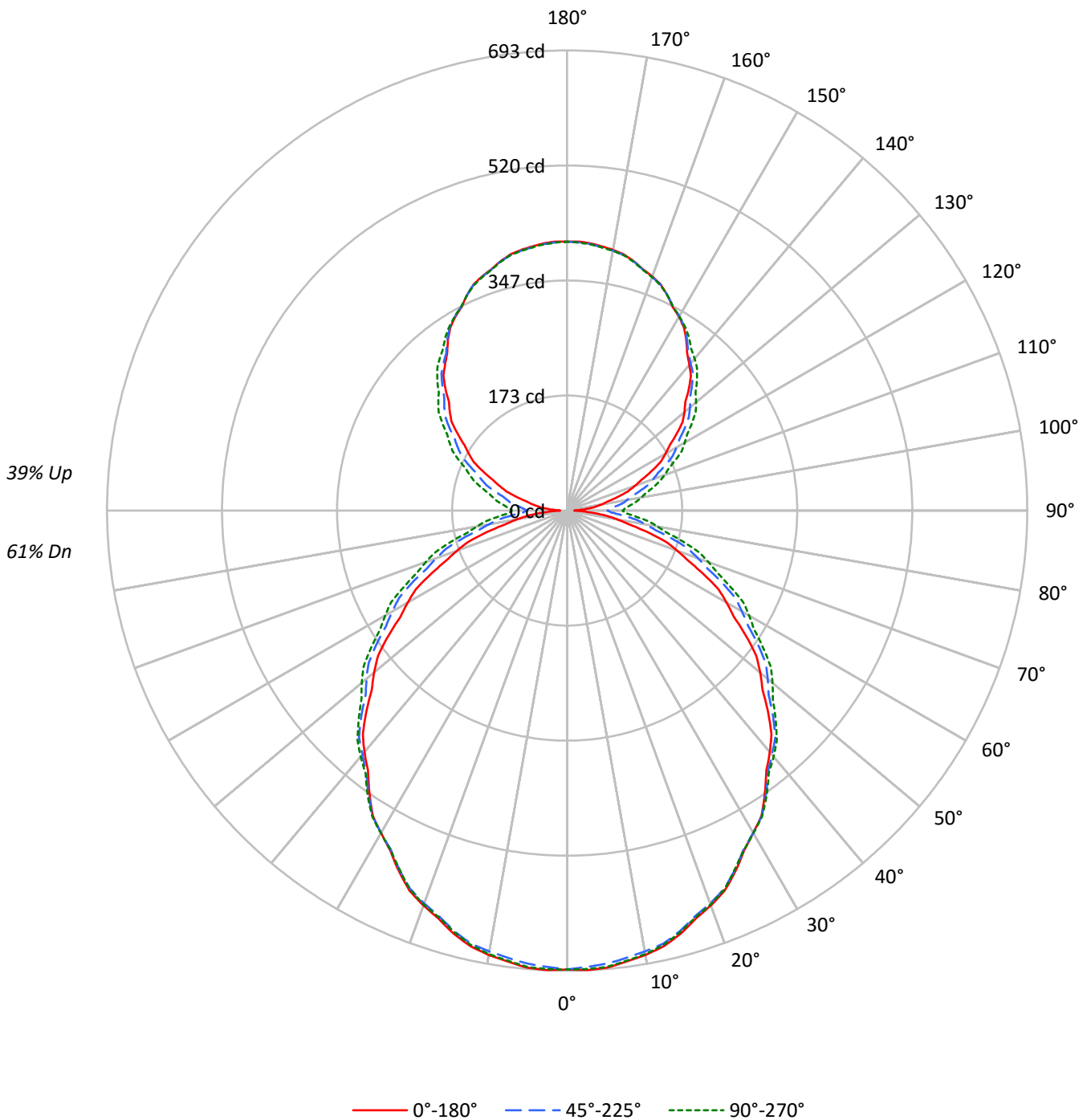
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	99	95	90	86	93	89	85	81	77	74	72	67	65	63	57	56	54	50
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45	41
3	82	72	64	58	76	67	60	55	59	54	49	51	47	43	44	41	38	34
4	75	64	55	49	70	60	52	46	52	46	42	46	41	37	39	36	33	29
5	69	57	48	42	64	53	45	40	47	41	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	55	43	36	30	38	32	27	34	28	25	29	25	22	19
8	54	42	34	28	51	39	32	27	35	29	24	31	26	22	27	23	20	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18	16
10	47	35	27	22	44	33	26	22	29	24	20	26	21	18	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4463	4463	4463
5°	4472	4380	4394
10°	4440	4302	4295
15°	4388	4209	4171
20°	4316	4093	4045
25°	4232	3969	3891
30°	4129	3833	3751
35°	4033	3708	3622
40°	3935	3576	3493
45°	3825	3463	3378
50°	3720	3340	3276
55°	3593	3225	3156
60°	3455	3093	3035
65°	3310	2956	2898
70°	3145	2767	2758
75°	2887	2586	2585
80°	2548	2365	2396
85°	2232	2219	2336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	2.0
10°-20°	185.5	5.7
20°-30°	275.9	8.4
30°-40°	326.8	10.0
40°-50°	337.9	10.3
50°-60°	311.2	9.5
60°-70°	251.6	7.7
70°-80°	168.5	5.2
80°-90°	88.3	2.7
90°-100°	76.2	2.3
100°-110°	116.3	3.6
110°-120°	159.9	4.9
120°-130°	192.3	5.9
130°-140°	206.1	6.3
140°-150°	197.3	6.0
150°-160°	164.7	5.0
160°-170°	109.5	3.3
170°-180°	38.3	1.2
0°-30°	526.7	16.1
0°-40°	853.5	26.1
0°-60°	1502.6	45.9
0°-90°	2010.9	61.5
90°-120°	352.3	10.8
90°-150°	948.0	29.0
90°-180°	1261.0	38.5
0°-180°	3271.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	691	690	685	690	690	66
15°	660	660	656	660	657	186
25°	600	601	598	600	597	276
35°	519	523	522	524	524	325
45°	428	435	438	443	444	330
55°	329	339	350	357	360	294
65°	226	242	258	268	271	224
75°	125	143	164	177	181	132
85°	37	60	83	98	104	40
90°	11	35	61	77	84	8
95°	29	48	74	90	96	29
105°	78	91	113	128	134	83
115°	140	147	164	176	180	138
125°	201	203	216	226	229	180
135°	259	261	266	274	276	200
145°	313	314	314	318	320	195
155°	357	357	358	359	357	165
165°	389	388	388	389	388	110
175°	404	403	403	404	402	38
180°	405	405	405	405	405	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	692.7	692.4	692.2	692.0	691.7	691.2	690.4	689.5	688.7	687.8	688.7
5°	691.1	690.7	690.5	690.2	689.8	689.2	688.1	687.1	686.0	684.9	686.2
7.5°	684.9	684.8	684.7	684.6	684.5	683.9	682.8	681.7	680.6	679.6	680.6
10°	679.6	679.6	679.6	679.6	679.6	678.9	677.7	676.5	675.3	674.1	675.2
12.5°	672.0	672.1	672.2	672.3	672.4	672.0	671.0	670.1	669.1	668.2	669.0
15°	659.9	660.0	660.2	660.3	660.5	660.0	659.0	657.9	656.9	655.9	656.7
17.5°	644.2	644.4	644.8	645.1	645.4	645.0	644.0	642.9	641.9	640.8	641.5
20°	632.8	633.1	633.4	633.7	634.0	633.6	632.6	631.5	630.4	629.4	629.8
22.5°	619.8	620.4	620.9	621.4	622.0	621.6	620.5	619.3	618.1	617.0	617.5
25°	599.6	600.0	600.5	600.9	601.4	601.2	600.3	599.4	598.4	597.5	598.2
27.5°	577.1	577.7	578.5	579.1	579.8	579.6	578.5	577.6	576.5	575.5	575.9
30°	560.3	561.2	562.1	563.0	563.9	563.9	563.0	562.1	561.2	560.3	560.6
32.5°	545.1	545.9	546.7	547.5	548.2	548.3	547.7	547.0	546.4	545.6	546.0
35°	519.0	520.0	521.1	522.1	523.2	523.5	523.1	522.5	522.1	521.7	522.1
37.5°	492.8	493.8	494.7	495.7	496.7	497.0	497.0	496.8	496.6	496.5	497.0
40°	474.9	476.2	477.3	478.6	479.7	480.3	480.1	480.0	479.8	479.7	480.3
42.5°	455.4	457.0	458.5	460.1	461.7	462.6	463.0	463.3	463.6	464.0	464.7
45°	427.5	429.2	430.8	432.5	434.2	435.3	436.1	436.8	437.6	438.4	439.4
47.5°	399.0	400.5	402.0	403.5	405.1	406.4	407.8	409.0	410.4	411.6	413.2
50°	379.4	381.0	382.7	384.4	386.0	387.7	389.3	391.0	392.6	394.3	396.0
52.5°	358.8	360.8	362.8	364.9	366.8	368.9	371.0	372.9	375.0	376.9	378.7
55°	328.6	331.0	333.4	335.8	338.2	340.6	343.0	345.4	347.9	350.3	352.0
57.5°	297.7	300.6	303.4	306.4	309.2	312.1	314.9	317.6	320.4	323.2	325.0
60°	277.1	280.1	283.1	286.1	289.2	292.1	295.2	298.2	301.2	304.2	306.5
62.5°	257.1	260.0	263.1	266.1	269.1	272.2	275.4	278.7	282.0	285.3	287.8
65°	226.3	229.8	233.2	236.7	240.1	243.7	247.3	250.9	254.5	258.2	260.4
67.5°	197.3	200.6	203.9	207.3	210.6	214.2	217.8	221.5	225.2	228.9	231.6
70°	176.1	179.6	183.1	186.5	190.0	193.7	197.6	201.5	205.5	209.4	212.2
72.5°	155.5	159.2	162.7	166.3	169.9	173.8	178.1	182.4	186.6	190.9	194.0
75°	124.7	128.6	132.5	136.4	140.4	144.7	149.5	154.4	159.2	164.0	166.9
77.5°	95.0	99.5	104.1	108.5	113.1	117.6	122.3	126.9	131.5	136.2	139.5
80°	76.6	81.1	85.6	90.2	94.6	99.4	104.6	109.7	114.8	119.9	123.2
82.5°	59.7	64.5	69.3	74.0	78.8	83.8	89.0	94.3	99.5	104.8	107.9
85°	37.3	42.3	47.2	52.2	57.2	62.2	67.5	72.8	78.0	83.4	86.7
87.5°	21.2	26.1	31.0	36.0	40.9	46.0	51.2	56.4	61.6	66.9	70.4
90°	11.1	16.5	21.9	27.3	32.6	38.2	43.8	49.4	55.0	60.6	64.4
92.5°	17.4	22.2	27.1	31.9	36.7	42.1	48.0	53.8	59.7	65.5	69.3
95°	29.3	33.3	37.4	41.5	45.5	50.5	56.3	62.1	67.9	73.7	77.5
97.5°	42.0	45.7	49.2	52.8	56.4	61.1	67.0	72.9	78.8	84.7	88.4
100°	51.5	54.8	57.9	61.1	64.2	68.7	74.4	80.2	85.9	91.6	95.4
102.5°	61.9	65.1	68.3	71.5	74.6	78.8	84.0	89.2	94.3	99.5	103.3
105°	77.9	80.7	83.5	86.2	89.0	92.8	97.8	102.7	107.6	112.6	116.0
107.5°	95.8	98.2	100.6	103.0	105.4	108.9	113.6	118.2	122.9	127.5	130.7
110°	108.1	110.3	112.4	114.6	116.7	120.0	124.5	128.9	133.3	137.8	140.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	121.3	122.9	124.5	126.1	127.8	130.7	135.1	139.5	143.8	148.2	151.1
115°	139.9	141.2	142.6	143.9	145.3	147.9	151.9	156.0	160.1	164.2	166.7
117.5°	158.6	159.4	160.2	161.1	161.9	164.3	168.1	171.9	175.8	179.6	182.2
120°	170.8	171.6	172.4	173.2	174.0	176.1	179.7	183.2	186.7	190.3	192.8
122.5°	183.3	183.6	184.0	184.3	184.7	186.5	190.1	193.7	197.2	200.7	203.0
125°	201.0	201.3	201.5	201.8	202.1	203.7	206.8	209.9	212.9	216.1	218.3
127.5°	219.2	219.3	219.4	219.5	219.5	220.9	223.4	226.0	228.5	231.0	233.2
130°	230.5	230.7	231.0	231.1	231.3	232.6	234.8	237.0	239.3	241.6	243.6
132.5°	241.3	241.9	242.5	243.0	243.5	244.6	246.2	247.8	249.4	251.0	253.0
135°	259.1	259.4	259.7	259.9	260.2	260.9	262.1	263.1	264.3	265.5	267.4
137.5°	275.9	276.2	276.5	276.8	277.1	277.5	278.2	278.8	279.6	280.2	282.0
140°	286.2	286.6	287.0	287.3	287.6	287.9	288.4	288.7	289.1	289.4	291.2
142.5°	297.0	297.2	297.4	297.6	297.7	298.0	298.3	298.5	298.9	299.2	300.7
145°	313.0	313.2	313.3	313.4	313.5	313.7	313.9	314.1	314.3	314.5	315.3
147.5°	327.1	327.3	327.3	327.5	327.7	327.9	328.1	328.2	328.3	328.5	329.0
150°	336.9	336.9	336.8	336.7	336.6	336.7	337.0	337.3	337.6	337.9	337.9
152.5°	345.0	345.1	345.2	345.3	345.4	345.4	345.6	345.7	345.8	345.9	346.1
155°	357.4	357.4	357.4	357.4	357.4	357.4	357.5	357.6	357.7	357.8	358.0
157.5°	368.5	368.4	368.2	368.0	367.9	367.8	367.9	368.0	368.0	368.1	368.4
160°	375.1	374.9	374.6	374.4	374.3	374.2	374.3	374.3	374.3	374.4	374.7
162.5°	380.8	380.7	380.6	380.4	380.2	380.1	380.1	380.2	380.2	380.2	380.6
165°	388.6	388.4	388.3	388.2	388.1	388.0	388.1	388.2	388.3	388.3	388.6
167.5°	395.1	394.8	394.6	394.3	394.0	393.9	393.9	393.9	393.9	393.9	394.3
170°	398.7	398.4	398.1	397.9	397.5	397.4	397.4	397.4	397.4	397.4	397.9
172.5°	401.2	400.9	400.6	400.4	400.1	399.9	399.9	399.9	399.9	399.9	400.4
175°	404.0	403.8	403.5	403.2	403.0	402.8	402.8	402.8	402.8	402.8	403.2
177.5°	405.5	405.3	405.0	404.8	404.6	404.5	404.4	404.4	404.3	404.2	404.6
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	689.5	690.4	691.2	691.5	691.4	691.3	691.2	691.1
5°	687.3	688.6	689.7	690.3	690.2	690.0	689.8	689.7
7.5°	681.6	682.7	683.8	684.2	684.0	683.9	683.8	683.6
10°	676.3	677.3	678.3	678.8	678.7	678.5	678.3	678.1
12.5°	669.8	670.6	671.5	671.6	671.2	670.8	670.5	670.0
15°	657.6	658.5	659.4	659.6	659.0	658.4	657.8	657.2
17.5°	642.2	642.8	643.5	643.7	643.4	643.0	642.7	642.3
20°	630.4	630.8	631.2	631.4	631.4	631.4	631.4	631.4
22.5°	618.0	618.7	619.2	619.3	618.9	618.6	618.2	617.9
25°	598.8	599.4	599.9	599.9	599.1	598.4	597.6	596.9
27.5°	576.3	576.8	577.2	577.2	576.9	576.7	576.4	576.1
30°	560.9	561.2	561.5	561.6	561.4	561.2	561.2	561.0
32.5°	546.3	546.5	546.9	547.0	546.8	546.6	546.5	546.4
35°	522.5	523.1	523.5	523.7	523.7	523.7	523.7	523.7
37.5°	497.7	498.3	498.9	499.2	499.1	499.0	499.0	498.9
40°	480.9	481.5	482.1	482.5	482.9	483.1	483.5	483.8
42.5°	465.4	466.1	466.8	467.3	467.3	467.3	467.4	467.5
45°	440.4	441.5	442.6	443.2	443.4	443.4	443.6	443.8
47.5°	414.7	416.3	417.8	418.7	419.1	419.4	419.7	420.1
50°	397.6	399.3	400.9	402.0	402.4	402.9	403.3	403.8
52.5°	380.5	382.3	384.1	385.1	385.5	385.8	386.1	386.5
55°	353.6	355.3	356.9	358.0	358.6	359.3	359.8	360.4
57.5°	327.0	328.9	330.7	331.9	332.4	332.9	333.3	333.8
60°	308.7	310.9	313.3	314.6	315.0	315.5	315.9	316.4
62.5°	290.3	292.7	295.2	296.8	297.3	297.9	298.5	299.1
65°	262.6	264.9	267.2	268.6	269.2	269.8	270.4	271.0
67.5°	234.3	237.1	239.8	241.6	242.4	243.2	244.0	244.7
70°	215.1	217.9	220.8	222.7	223.6	224.4	225.4	226.3
72.5°	197.2	200.2	203.3	205.2	205.9	206.5	207.2	207.9
75°	170.0	173.0	176.0	177.9	178.6	179.4	180.1	180.9
77.5°	142.8	146.2	149.5	151.4	151.9	152.6	153.2	153.8
80°	126.5	129.8	133.1	135.1	135.7	136.3	137.0	137.5
82.5°	111.1	114.3	117.5	119.7	120.7	121.8	122.9	123.9
85°	90.0	93.3	96.6	98.8	100.0	101.2	102.5	103.6
87.5°	73.9	77.5	81.0	83.3	84.4	85.5	86.6	87.7
90°	68.2	72.1	75.9	78.4	79.6	80.9	82.2	83.5
92.5°	73.1	76.9	80.7	83.2	84.4	85.6	86.9	88.0
95°	81.3	85.2	88.9	91.4	92.6	93.8	95.1	96.2
97.5°	91.9	95.6	99.2	101.6	102.6	103.8	104.9	106.0
100°	99.2	103.0	106.7	109.1	110.2	111.3	112.3	113.3
102.5°	106.9	110.7	114.4	116.8	117.9	119.0	120.1	121.2
105°	119.5	122.9	126.4	128.7	129.9	131.2	132.4	133.8
107.5°	133.9	137.1	140.4	142.4	143.3	144.2	145.2	146.1
110°	143.9	147.0	150.0	152.0	153.0	154.0	155.0	156.0



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CATALOG NUMBER: S125DIP-S610D365U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	153.8	156.7	159.5	161.4	162.4	163.3	164.2	165.1
115°	169.4	172.1	174.7	176.5	177.3	178.1	179.0	179.8
117.5°	184.8	187.4	190.0	191.7	192.4	193.1	193.9	194.7
120°	195.4	198.0	200.5	202.1	202.7	203.3	203.9	204.6
122.5°	205.5	207.9	210.2	211.8	212.4	213.1	213.7	214.5
125°	220.6	222.8	225.1	226.6	227.3	227.9	228.6	229.3
127.5°	235.4	237.6	239.7	241.1	241.9	242.6	243.3	244.1
130°	245.6	247.6	249.7	251.0	251.6	252.3	252.9	253.5
132.5°	255.0	257.1	259.1	260.4	260.8	261.3	261.6	262.1
135°	269.4	271.3	273.2	274.5	274.9	275.4	275.9	276.3
137.5°	283.9	285.8	287.7	288.7	288.9	289.2	289.4	289.7
140°	293.0	294.8	296.6	297.7	297.9	298.1	298.4	298.6
142.5°	302.2	303.7	305.1	306.0	306.3	306.6	306.8	307.0
145°	316.0	316.8	317.5	318.2	318.5	318.9	319.3	319.7
147.5°	329.3	329.8	330.2	330.3	330.0	329.8	329.7	329.5
150°	337.9	337.9	337.9	337.9	337.9	337.9	337.9	337.9
152.5°	346.3	346.4	346.6	346.6	346.3	346.2	345.9	345.7
155°	358.3	358.6	358.8	358.8	358.5	358.1	357.8	357.4
157.5°	368.6	369.0	369.3	369.2	368.7	368.2	367.7	367.3
160°	375.0	375.2	375.5	375.5	375.1	374.8	374.4	374.1
162.5°	380.8	381.2	381.6	381.6	381.1	380.7	380.3	379.9
165°	388.9	389.1	389.4	389.3	388.9	388.5	388.1	387.6
167.5°	394.8	395.1	395.6	395.6	395.1	394.7	394.2	393.9
170°	398.2	398.7	399.1	399.0	398.6	398.1	397.6	397.1
172.5°	400.8	401.2	401.6	401.6	401.2	400.7	400.3	399.8
175°	403.6	404.0	404.5	404.4	403.9	403.4	403.0	402.4
177.5°	404.9	405.3	405.6	405.6	405.2	404.7	404.4	403.9
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0

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