

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: P333369-830

Luminaire Tested: **S125DIW-S375D1560U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333369-830
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: S125DIW-S375D1560U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6533.9 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

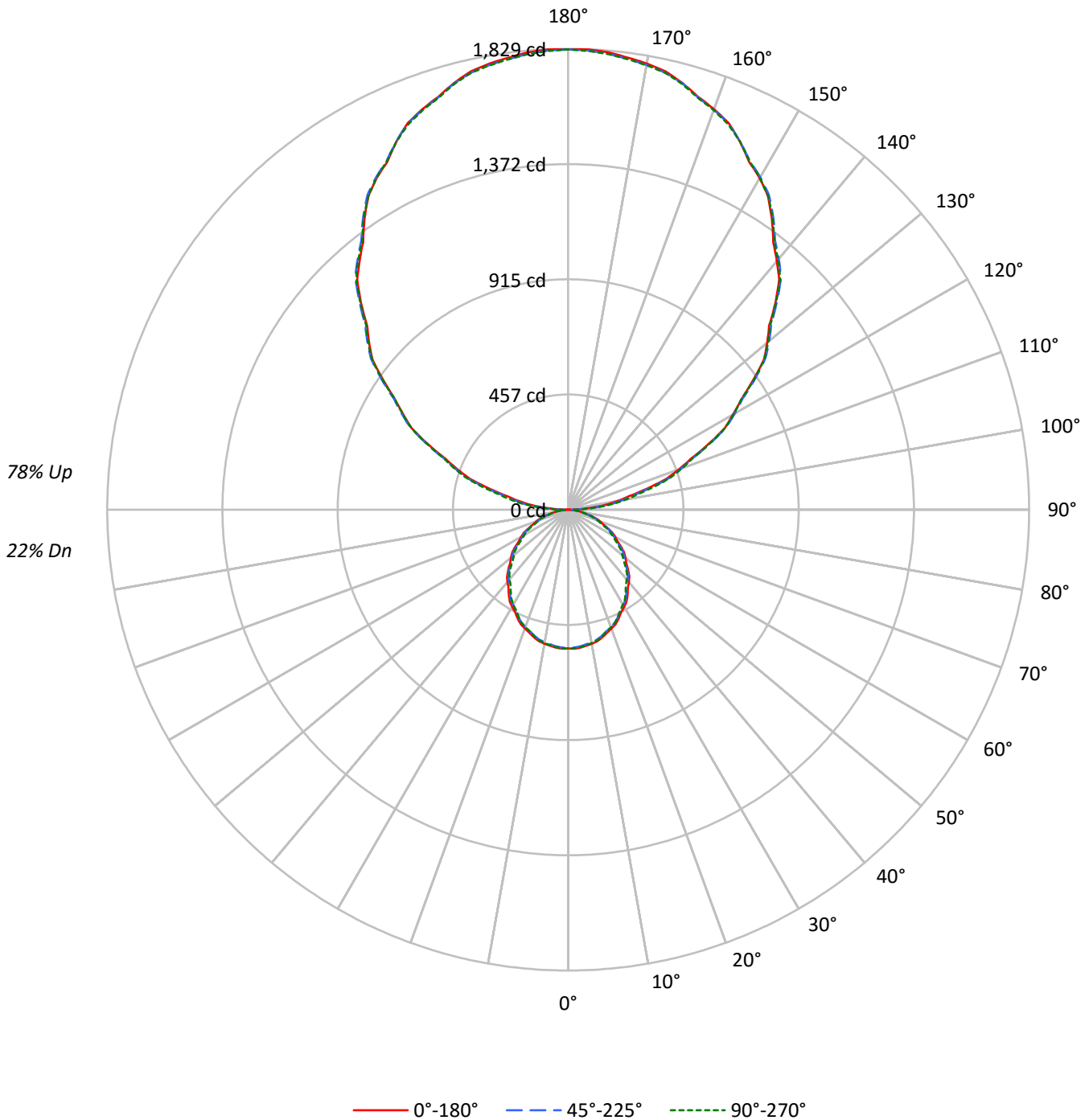
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22				
1	91	87	84	80	81	78	74	72	59	57	55	42	41	40	27	26	26	18				
2	83	76	70	65	74	68	63	59	52	48	46	37	35	33	23	22	21	15				
3	76	67	60	54	67	59	54	49	46	42	38	33	30	28	21	19	18	13				
4	69	59	51	46	61	53	46	41	40	36	32	29	26	24	19	17	16	11				
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	14	10				
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	9				
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	11	8				
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	13	11	9	7				
9	46	35	27	23	41	31	25	20	24	20	16	18	15	12	12	10	8	6				
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3556	3556	3556
5°	3564	3530	3553
10°	3543	3505	3525
15°	3504	3463	3477
20°	3449	3404	3410
25°	3390	3334	3331
30°	3317	3258	3242
35°	3239	3177	3132
40°	3159	3089	3044
45°	3072	3008	2948
50°	2976	2910	2823
55°	2884	2800	2723
60°	2773	2689	2595
65°	2644	2557	2470
70°	2517	2402	2319
75°	2293	2218	2141
80°	2042	2008	1960
85°	1771	1808	1712



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	0.8
10°-20°	146.6	2.2
20°-30°	216.5	3.3
30°-40°	252.7	3.9
40°-50°	253.8	3.9
50°-60°	222.8	3.4
60°-70°	166.0	2.5
70°-80°	94.9	1.5
80°-90°	31.6	0.5
90°-100°	122.3	1.9
100°-110°	361.3	5.5
110°-120°	611.9	9.4
120°-130°	805.3	12.3
130°-140°	902.4	13.8
140°-150°	884.4	13.5
150°-160°	742.8	11.4
160°-170°	493.8	7.6
170°-180°	172.8	2.6
0°-30°	415.1	6.4
0°-40°	667.8	10.2
0°-60°	1144.3	17.5
0°-90°	1436.8	22.0
90°-120°	1095.5	16.8
90°-150°	3687.7	56.4
90°-180°	5097.0	78.0
0°-180°	6533.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	550	549	544	548	548	52
15°	524	522	518	520	520	148
25°	476	473	468	469	467	219
35°	411	409	403	401	397	257
45°	336	334	329	324	323	259
55°	256	255	249	245	242	229
65°	173	172	167	164	162	172
75°	92	91	89	88	86	98
85°	24	24	24	24	23	27
90°	1	13	23	30	34	6
95°	92	96	109	119	122	99
105°	324	331	340	348	352	346
115°	613	618	621	620	618	606
125°	894	902	904	901	900	800
135°	1163	1171	1173	1172	1167	896
145°	1409	1414	1419	1418	1414	880
155°	1612	1612	1613	1618	1612	742
165°	1753	1750	1751	1756	1748	494
175°	1822	1817	1817	1824	1815	173
180°	1827	1827	1827	1827	1827	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	552.0	551.8	551.6	551.3	551.1	550.5	549.8	549.0	548.3	547.4	548.3
5°	549.7	549.5	549.3	549.1	548.9	548.4	547.4	546.5	545.4	544.5	545.4
7.5°	544.7	544.5	544.3	544.1	543.9	543.3	542.2	541.1	540.1	539.0	539.9
10°	540.2	540.0	539.8	539.6	539.4	538.8	537.7	536.6	535.6	534.5	535.3
12.5°	534.6	534.2	533.9	533.6	533.2	532.5	531.5	530.6	529.5	528.6	529.1
15°	524.1	523.8	523.5	523.2	522.8	522.2	521.1	520.1	519.0	517.9	518.4
17.5°	511.9	511.5	511.0	510.7	510.2	509.4	508.3	507.3	506.1	505.0	505.7
20°	501.8	501.6	501.4	501.2	501.1	500.3	499.1	497.8	496.5	495.3	496.0
22.5°	491.7	491.3	491.0	490.7	490.3	489.6	488.3	487.2	486.0	484.8	485.3
25°	475.7	475.2	474.7	474.2	473.7	472.9	471.6	470.3	469.1	467.9	468.1
27.5°	456.9	456.7	456.4	456.1	455.8	455.0	453.7	452.4	451.1	449.8	449.9
30°	444.8	444.5	444.1	443.8	443.6	442.7	441.3	439.8	438.4	436.9	436.7
32.5°	431.5	431.0	430.6	430.2	429.7	428.9	427.5	426.2	425.0	423.7	423.3
35°	410.8	410.4	410.0	409.6	409.3	408.3	407.0	405.7	404.3	402.9	402.5
37.5°	389.3	388.8	388.3	387.8	387.3	386.4	385.1	383.9	382.6	381.4	380.6
40°	374.7	374.1	373.6	373.2	372.7	371.7	370.4	369.1	367.7	366.4	365.5
42.5°	358.9	358.5	358.2	357.7	357.3	356.5	355.1	353.7	352.3	351.0	350.2
45°	336.3	335.9	335.5	335.2	334.7	333.9	332.8	331.7	330.5	329.3	328.2
47.5°	311.9	311.9	311.9	312.0	312.0	311.3	309.9	308.5	307.1	305.7	304.5
50°	296.2	296.0	295.7	295.3	295.0	294.4	293.1	292.0	290.9	289.6	288.4
52.5°	280.2	279.9	279.7	279.6	279.4	278.6	277.4	276.2	274.8	273.6	272.6
55°	256.1	255.8	255.5	255.2	255.0	254.1	252.8	251.5	250.1	248.7	247.9
57.5°	230.8	230.6	230.5	230.4	230.2	229.5	228.4	227.2	226.1	225.0	223.9
60°	214.7	214.3	214.0	213.6	213.2	212.4	211.4	210.4	209.2	208.2	207.3
62.5°	198.0	197.7	197.4	197.1	196.8	196.1	195.3	194.4	193.4	192.6	191.5
65°	173.0	172.8	172.6	172.4	172.2	171.5	170.5	169.4	168.3	167.3	166.4
67.5°	148.6	148.3	147.8	147.4	147.0	146.4	145.6	144.8	144.0	143.3	142.5
70°	133.3	132.8	132.3	131.9	131.4	130.6	129.8	128.9	128.1	127.2	126.6
72.5°	116.6	116.2	115.9	115.6	115.3	114.8	114.2	113.7	113.1	112.5	111.9
75°	91.9	91.7	91.5	91.3	91.1	90.8	90.3	89.8	89.4	88.9	88.6
77.5°	69.2	69.1	69.0	68.9	68.9	68.7	68.4	68.1	67.9	67.6	67.4
80°	54.9	54.9	54.9	54.9	54.9	54.8	54.6	54.4	54.2	54.0	53.9
82.5°	42.3	42.2	42.0	41.8	41.8	41.7	41.6	41.6	41.5	41.5	41.3
85°	23.9	24.0	24.1	24.2	24.3	24.4	24.4	24.4	24.4	24.4	24.3
87.5°	9.7	10.2	10.7	11.2	11.7	12.2	12.5	12.9	13.3	13.6	13.9
90°	1.4	4.0	6.5	9.0	11.5	13.9	16.1	18.3	20.5	22.7	24.3
92.5°	34.4	36.2	38.0	39.7	41.5	43.7	46.5	49.1	51.8	54.6	56.6
95°	92.4	93.0	93.7	94.3	94.9	96.8	100.0	103.1	106.3	109.4	111.7
97.5°	153.5	153.7	154.0	154.3	154.6	156.8	161.2	165.6	169.9	174.3	176.3
100°	199.0	199.0	199.0	199.0	199.0	201.0	205.2	209.2	213.4	217.4	220.4
102.5°	247.9	249.2	250.4	251.7	253.0	254.7	256.7	258.8	260.9	263.0	266.1
105°	324.1	325.6	327.3	328.9	330.5	332.2	334.0	335.9	337.8	339.8	341.7
107.5°	408.2	409.8	411.4	413.0	414.5	416.1	417.5	419.0	420.5	421.9	422.8
110°	466.3	467.9	469.4	471.0	472.6	473.8	474.8	475.7	476.6	477.6	478.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	525.4	526.2	527.1	527.8	528.7	529.7	530.8	532.1	533.3	534.5	534.9
115°	612.7	614.0	615.2	616.4	617.7	618.7	619.3	619.9	620.6	621.2	620.9
117.5°	700.2	700.8	701.3	701.9	702.5	703.0	703.6	704.2	704.7	705.4	705.6
120°	754.8	756.4	758.0	759.6	761.1	762.0	762.4	762.7	763.0	763.4	763.4
122.5°	814.0	814.5	815.1	815.7	816.2	816.9	817.7	818.6	819.4	820.2	819.9
125°	894.1	896.0	898.0	899.8	901.7	902.9	903.1	903.4	903.8	904.1	903.4
127.5°	979.4	980.5	981.6	982.6	983.7	984.5	984.9	985.2	985.6	986.0	985.6
130°	1030.6	1032.2	1033.8	1035.3	1036.9	1038.0	1038.7	1039.2	1039.9	1040.6	1040.2
132.5°	1081.8	1084.4	1086.9	1089.6	1092.1	1093.3	1093.3	1093.1	1093.0	1092.9	1092.5
135°	1162.8	1164.7	1166.6	1168.5	1170.4	1171.5	1171.8	1172.1	1172.4	1172.7	1172.7
137.5°	1239.0	1240.9	1242.6	1244.4	1246.3	1247.5	1248.3	1249.0	1249.6	1250.4	1250.8
140°	1287.9	1289.5	1291.0	1292.6	1294.2	1295.4	1296.4	1297.4	1298.4	1299.3	1299.9
142.5°	1336.8	1338.1	1339.4	1340.8	1342.1	1343.3	1344.5	1345.8	1347.0	1348.1	1348.5
145°	1408.7	1409.9	1411.3	1412.5	1413.8	1414.9	1415.8	1416.7	1417.7	1418.6	1418.6
147.5°	1475.3	1475.9	1476.6	1477.3	1478.0	1478.8	1479.5	1480.3	1481.0	1481.8	1482.5
150°	1519.6	1519.3	1519.0	1518.6	1518.3	1518.8	1520.0	1521.4	1522.6	1523.9	1523.9
152.5°	1555.9	1556.4	1556.9	1557.3	1557.7	1558.2	1558.8	1559.2	1559.7	1560.3	1561.0
155°	1612.0	1612.0	1612.0	1612.0	1612.0	1612.1	1612.5	1612.8	1613.1	1613.4	1614.7
157.5°	1662.0	1661.3	1660.7	1659.9	1659.3	1659.1	1659.3	1659.7	1660.0	1660.3	1661.6
160°	1691.6	1690.6	1689.7	1688.8	1687.8	1687.5	1687.8	1688.1	1688.5	1688.8	1690.0
162.5°	1717.8	1717.0	1716.4	1715.7	1715.0	1714.7	1714.7	1714.8	1714.9	1714.9	1716.5
165°	1752.8	1752.1	1751.4	1750.9	1750.2	1750.0	1750.4	1750.7	1751.0	1751.3	1752.6
167.5°	1782.3	1781.0	1779.8	1778.5	1777.3	1776.6	1776.6	1776.6	1776.6	1776.6	1778.5
170°	1798.2	1797.0	1795.6	1794.4	1793.2	1792.5	1792.5	1792.5	1792.5	1792.5	1794.4
172.5°	1809.6	1808.4	1807.0	1805.8	1804.5	1803.9	1803.9	1803.9	1803.9	1803.9	1805.8
175°	1822.4	1821.1	1819.9	1818.5	1817.3	1816.7	1816.7	1816.7	1816.7	1816.7	1818.5
177.5°	1828.9	1827.9	1826.9	1825.9	1824.9	1824.2	1824.0	1823.7	1823.4	1823.3	1824.8
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	549.0	549.8	550.5	550.9	550.8	550.7	550.7	550.6
5°	546.2	547.1	548.0	548.4	548.3	548.2	548.1	548.0
7.5°	540.7	541.6	542.4	542.8	542.7	542.6	542.5	542.4
10°	536.0	536.8	537.6	537.9	537.8	537.7	537.6	537.5
12.5°	529.8	530.5	531.0	531.3	531.3	531.3	531.3	531.2
15°	518.9	519.3	519.9	520.1	520.1	520.1	520.1	520.1
17.5°	506.2	506.8	507.5	507.5	507.0	506.5	506.1	505.6
20°	496.6	497.3	497.9	498.1	497.6	497.1	496.6	496.2
22.5°	485.7	486.2	486.6	486.6	486.4	486.0	485.7	485.3
25°	468.3	468.4	468.6	468.5	468.3	468.0	467.7	467.4
27.5°	449.9	449.9	450.0	449.9	449.5	449.2	448.9	448.7
30°	436.5	436.3	436.1	435.9	435.6	435.4	435.0	434.7
32.5°	423.0	422.6	422.3	421.9	421.3	420.8	420.3	419.7
35°	402.0	401.5	401.0	400.4	399.6	398.8	398.0	397.3
37.5°	379.9	379.2	378.4	377.9	377.4	377.0	376.5	376.1
40°	364.6	363.7	362.9	362.3	362.0	361.7	361.4	361.1
42.5°	349.4	348.6	347.8	347.2	346.8	346.3	345.9	345.4
45°	327.0	325.8	324.7	324.0	323.7	323.4	323.1	322.8
47.5°	303.3	302.2	301.0	300.0	299.4	298.7	298.0	297.4
50°	287.2	285.9	284.6	283.7	283.0	282.3	281.6	281.0
52.5°	271.5	270.3	269.2	268.3	267.6	266.8	266.1	265.3
55°	246.9	246.1	245.2	244.5	243.8	243.1	242.4	241.8
57.5°	222.7	221.6	220.5	219.7	219.3	219.0	218.6	218.2
60°	206.3	205.3	204.3	203.5	202.8	202.2	201.5	200.9
62.5°	190.5	189.4	188.3	187.6	187.1	186.5	186.0	185.5
65°	165.5	164.7	163.8	163.2	162.8	162.4	162.0	161.6
67.5°	141.8	141.0	140.3	139.8	139.6	139.3	139.1	138.8
70°	126.0	125.5	124.9	124.4	124.0	123.7	123.2	122.8
72.5°	111.2	110.6	109.9	109.4	109.1	108.7	108.2	107.8
75°	88.3	88.0	87.7	87.4	87.0	86.6	86.2	85.8
77.5°	67.3	67.1	66.9	66.7	66.4	66.2	65.9	65.6
80°	53.8	53.7	53.6	53.4	53.3	53.1	52.9	52.7
82.5°	41.1	40.9	40.8	40.6	40.6	40.6	40.5	40.5
85°	24.2	24.1	24.0	23.8	23.7	23.5	23.3	23.1
87.5°	14.2	14.5	14.9	15.1	15.1	15.1	15.2	15.2
90°	25.9	27.5	29.0	30.3	31.3	32.2	33.2	34.1
92.5°	58.7	60.8	63.0	64.3	65.0	65.7	66.4	67.1
95°	113.9	116.1	118.3	119.7	120.4	121.0	121.6	122.2
97.5°	178.4	180.5	182.6	183.9	184.3	184.6	185.0	185.4
100°	223.2	226.0	228.8	230.6	231.2	231.9	232.5	233.1
102.5°	269.2	272.3	275.3	277.4	278.2	279.1	280.0	280.9
105°	343.6	345.4	347.3	348.7	349.7	350.6	351.6	352.5
107.5°	423.8	424.7	425.7	426.1	426.0	426.0	425.9	425.8
110°	479.6	480.5	481.5	481.7	481.5	481.1	480.8	480.5



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CATALOG NUMBER: S125DIW-S375D1560U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	535.4	535.8	536.2	536.2	535.6	535.1	534.5	534.0
115°	620.6	620.3	619.9	619.6	619.3	619.0	618.7	618.4
117.5°	705.9	706.2	706.3	705.9	704.6	703.3	702.1	700.8
120°	763.4	763.4	763.4	762.7	761.5	760.2	758.9	757.7
122.5°	819.7	819.4	819.2	818.6	817.6	816.5	815.5	814.5
125°	902.9	902.2	901.5	901.1	900.8	900.4	900.1	899.8
127.5°	985.3	985.1	984.7	984.2	983.5	983.0	982.3	981.7
130°	1039.9	1039.6	1039.2	1038.8	1038.2	1037.6	1036.9	1036.3
132.5°	1092.2	1091.9	1091.6	1091.0	1090.1	1089.2	1088.4	1087.4
135°	1172.7	1172.7	1172.7	1172.1	1170.8	1169.6	1168.3	1167.1
137.5°	1251.1	1251.5	1251.9	1251.3	1249.7	1248.1	1246.5	1244.9
140°	1300.5	1301.2	1301.7	1301.3	1299.8	1298.2	1296.6	1295.0
142.5°	1348.9	1349.2	1349.7	1349.1	1347.5	1346.0	1344.3	1342.7
145°	1418.6	1418.6	1418.6	1418.1	1417.2	1416.3	1415.3	1414.4
147.5°	1483.3	1484.0	1484.8	1484.1	1482.0	1479.8	1477.7	1475.6
150°	1523.9	1523.9	1523.9	1523.5	1522.9	1522.3	1521.6	1521.0
152.5°	1561.8	1562.5	1563.3	1563.1	1562.0	1560.9	1559.7	1558.6
155°	1615.9	1617.2	1618.4	1618.3	1616.7	1615.1	1613.5	1612.0
157.5°	1662.8	1664.2	1665.4	1665.0	1662.8	1660.8	1658.7	1656.6
160°	1691.3	1692.5	1693.8	1693.7	1692.1	1690.5	1688.9	1687.3
162.5°	1718.0	1719.5	1721.0	1720.8	1719.0	1717.1	1715.3	1713.4
165°	1753.8	1755.1	1756.3	1756.1	1754.2	1752.3	1750.4	1748.4
167.5°	1780.4	1782.3	1784.1	1784.1	1782.2	1780.3	1778.3	1776.3
170°	1796.3	1798.2	1800.1	1800.0	1797.7	1795.5	1793.3	1791.1
172.5°	1807.7	1809.6	1811.5	1811.5	1809.5	1807.5	1805.5	1803.6
175°	1820.5	1822.4	1824.3	1824.1	1821.9	1819.7	1817.5	1815.2
177.5°	1826.3	1827.8	1829.3	1829.2	1827.4	1825.6	1823.8	1822.1
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6

(END OF REPORT)