

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: P333343-940

Luminaire Tested: **S125DIW-S375D470U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333343-940
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: S125DIW-S375D470U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2752.3 lumens
Efficiency: N/A
Efficacy: 119.7 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: General Diffuse

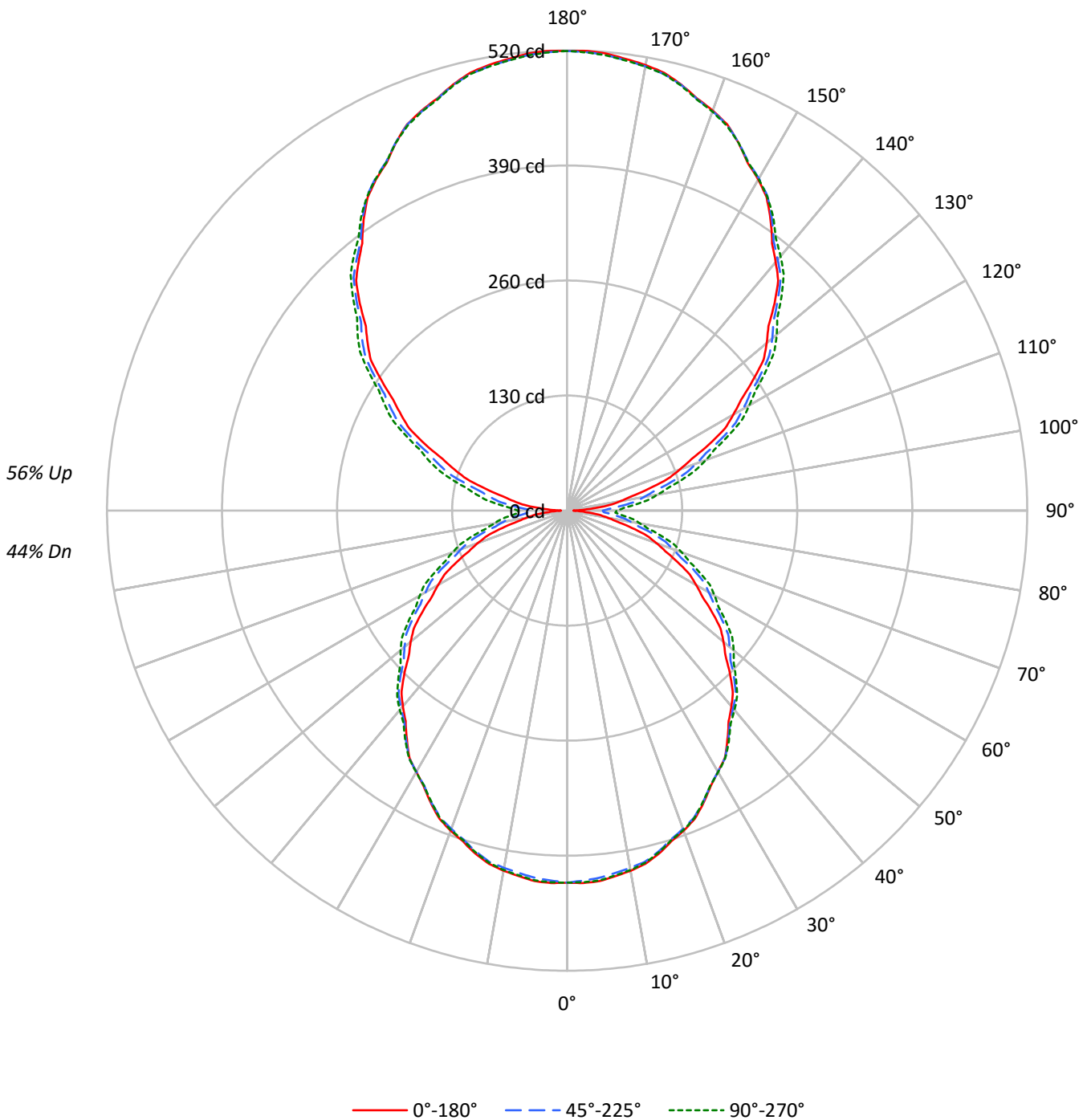
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333343-940

CATALOG NUMBER: S125DIW-S375D470U940-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333343-940

CATALOG NUMBER: S125DIW-S375D470U940-4F0-1E-UDD-D1

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	91	87	83	88	84	80	77	69	67	64	56	54	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	37	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	24	21	19	16
7	56	44	36	30	51	41	33	28	34	28	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	14	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



TEST NUMBER: P333343-940

CATALOG NUMBER: S125DIW-S375D470U940-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.4
10°-20°	112.8	4.1
20°-30°	167.8	6.1
30°-40°	198.8	7.2
40°-50°	205.5	7.5
50°-60°	189.3	6.9
60°-70°	153.0	5.6
70°-80°	102.5	3.7
80°-90°	54.3	2.0
90°-100°	64.6	2.3
100°-110°	124.7	4.5
110°-120°	188.7	6.9
120°-130°	237.3	8.6
130°-140°	260.2	9.5
140°-150°	252.2	9.2
150°-160°	211.2	7.7
160°-170°	140.4	5.1
170°-180°	49.1	1.8
0°-30°	320.4	11.6
0°-40°	519.2	18.9
0°-60°	914.0	33.2
0°-90°	1223.8	44.5
90°-120°	378.0	13.7
90°-150°	1127.8	41.0
90°-180°	1529.0	55.6
0°-180°	2752.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	7	23	40	51	56	6
95°	32	44	61	73	77	32
105°	96	105	119	130	134	102
115°	177	182	193	199	202	175
125°	256	258	266	272	274	229
135°	331	334	337	342	342	255
145°	401	402	403	405	406	250
155°	458	458	459	460	458	211
165°	498	498	498	499	497	141
175°	518	517	516	519	516	49
180°	519	519	519	519	519	



TEST NUMBER: P333343-940

CATALOG NUMBER: S125DIW-S375D470U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	12.9	16.1	19.1	22.2	25.2	28.4	31.7	34.9	38.1	41.4	43.5
90°	7.0	10.6	14.3	17.9	21.6	25.3	29.1	32.8	36.6	40.2	42.8
92.5°	15.7	18.9	22.1	25.3	28.5	32.2	36.1	40.0	44.1	48.0	50.6
95°	31.7	34.2	36.7	39.3	41.9	45.1	49.1	53.1	57.2	61.2	63.8
97.5°	48.5	50.7	53.0	55.2	57.3	60.6	64.8	69.1	73.3	77.6	80.1
100°	61.1	63.0	65.0	66.9	68.8	71.8	75.9	80.0	84.1	88.2	91.0
102.5°	74.7	76.9	78.9	81.1	83.2	86.1	89.4	92.9	96.4	99.8	102.5
105°	95.9	97.7	99.7	101.6	103.5	106.1	109.4	112.7	116.0	119.2	121.6
107.5°	119.3	121.0	122.7	124.4	126.1	128.4	131.5	134.6	137.6	140.6	142.8
110°	135.5	137.0	138.6	140.1	141.6	143.8	146.7	149.5	152.3	155.2	157.2



TEST NUMBER: P333343-940

CATALOG NUMBER: S125DIW-S375D470U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	152.3	153.4	154.4	155.6	156.7	158.7	161.5	164.3	167.2	170.0	171.8
115°	176.6	177.6	178.7	179.7	180.7	182.4	185.0	187.5	190.1	192.7	194.2
117.5°	201.2	201.7	202.3	202.9	203.5	205.0	207.4	209.8	212.2	214.6	216.2
120°	216.7	217.4	218.1	218.8	219.5	221.1	223.2	225.4	227.7	229.8	231.4
122.5°	233.2	233.4	233.7	234.0	234.3	235.6	237.8	240.1	242.4	244.7	246.0
125°	255.8	256.3	256.7	257.2	257.6	258.9	260.7	262.7	264.6	266.5	267.8
127.5°	279.7	279.9	280.1	280.4	280.5	281.4	283.1	284.7	286.3	287.9	289.2
130°	294.3	294.6	295.0	295.3	295.7	296.6	298.0	299.5	301.0	302.5	303.6
132.5°	308.4	309.2	309.9	310.6	311.4	312.2	313.2	314.1	315.0	316.0	317.2
135°	331.4	331.9	332.3	332.8	333.2	333.8	334.6	335.3	336.0	336.7	338.0
137.5°	353.0	353.5	353.9	354.4	354.8	355.3	355.8	356.3	356.8	357.3	358.5
140°	366.6	367.0	367.5	367.9	368.4	368.8	369.2	369.5	369.9	370.2	371.4
142.5°	380.5	380.8	381.1	381.4	381.7	382.0	382.4	382.7	383.1	383.4	384.4
145°	400.9	401.2	401.4	401.7	402.0	402.3	402.5	402.8	403.1	403.3	403.8
147.5°	419.5	419.6	419.8	420.0	420.3	420.4	420.6	420.9	421.1	421.3	421.7
150°	432.0	431.9	431.9	431.8	431.7	431.9	432.2	432.6	432.9	433.3	433.3
152.5°	442.4	442.6	442.6	442.7	442.9	443.0	443.2	443.4	443.4	443.6	443.8
155°	458.3	458.3	458.3	458.3	458.3	458.3	458.4	458.5	458.6	458.7	459.1
157.5°	472.5	472.3	472.2	472.0	471.7	471.7	471.8	471.9	472.0	472.1	472.4
160°	481.0	480.7	480.4	480.1	479.8	479.7	479.8	479.9	480.0	480.1	480.5
162.5°	488.4	488.2	488.0	487.8	487.6	487.5	487.5	487.5	487.6	487.6	488.0
165°	498.3	498.1	497.9	497.8	497.6	497.6	497.7	497.8	497.8	497.9	498.3
167.5°	506.8	506.4	506.0	505.7	505.3	505.2	505.2	505.2	505.2	505.2	505.7
170°	511.2	510.9	510.5	510.1	509.8	509.6	509.6	509.6	509.6	509.6	510.1
172.5°	514.5	514.2	513.8	513.4	513.1	512.9	512.9	512.9	512.9	512.9	513.4
175°	518.2	517.7	517.4	517.0	516.7	516.5	516.5	516.5	516.5	516.5	517.0
177.5°	520.0	519.7	519.4	519.2	518.8	518.6	518.6	518.5	518.4	518.4	518.8
180°	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3



TEST NUMBER: P333343-940

CATALOG NUMBER: S125DIW-S375D470U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	45.7	48.0	50.1	51.5	52.3	53.0	53.7	54.4
90°	45.4	47.9	50.5	52.3	53.1	54.0	54.9	55.8
92.5°	53.2	55.9	58.5	60.2	61.1	61.9	62.8	63.6
95°	66.5	69.1	71.8	73.5	74.4	75.2	76.0	76.8
97.5°	82.6	85.2	87.7	89.3	90.0	90.7	91.5	92.2
100°	93.7	96.4	99.2	100.9	101.6	102.4	103.1	103.8
102.5°	105.3	108.0	110.8	112.5	113.3	114.1	114.9	115.7
105°	124.0	126.4	128.8	130.4	131.3	132.2	133.1	134.0
107.5°	144.8	146.9	149.0	150.3	150.9	151.4	151.9	152.5
110°	159.2	161.2	163.2	164.5	165.1	165.6	166.1	166.7



TEST NUMBER: P333343-940

CATALOG NUMBER: S125DIW-S375D470U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	173.6	175.4	177.2	178.3	178.8	179.3	179.8	180.2
115°	195.8	197.3	198.9	199.9	200.4	200.8	201.3	201.8
117.5°	217.9	219.5	221.1	222.1	222.4	222.7	222.9	223.2
120°	232.9	234.5	236.0	236.9	237.1	237.3	237.5	237.6
122.5°	247.4	248.9	250.3	251.1	251.4	251.6	251.9	252.2
125°	269.1	270.4	271.7	272.5	272.9	273.2	273.6	273.9
127.5°	290.4	291.7	292.9	293.8	294.1	294.4	294.8	295.2
130°	304.8	306.0	307.2	307.9	308.3	308.5	308.8	309.1
132.5°	318.3	319.6	320.7	321.5	321.6	321.7	321.8	322.0
135°	339.1	340.3	341.5	342.1	342.2	342.3	342.4	342.5
137.5°	359.7	360.9	362.0	362.7	362.6	362.5	362.4	362.3
140°	372.6	373.8	375.0	375.5	375.4	375.3	375.2	375.2
142.5°	385.4	386.4	387.4	387.8	387.7	387.6	387.5	387.4
145°	404.3	404.7	405.2	405.5	405.6	405.6	405.7	405.8
147.5°	422.0	422.4	422.8	422.7	422.2	421.8	421.3	420.9
150°	433.3	433.3	433.3	433.2	433.1	433.0	432.9	432.8
152.5°	444.1	444.3	444.4	444.4	444.1	443.8	443.5	443.2
155°	459.4	459.8	460.1	460.1	459.7	459.2	458.8	458.3
157.5°	472.8	473.1	473.5	473.4	472.8	472.2	471.6	471.0
160°	480.9	481.3	481.6	481.5	481.1	480.6	480.2	479.7
162.5°	488.5	488.8	489.3	489.3	488.7	488.2	487.7	487.1
165°	498.6	499.0	499.4	499.3	498.7	498.2	497.7	497.1
167.5°	506.2	506.8	507.3	507.3	506.7	506.1	505.6	505.1
170°	510.7	511.2	511.8	511.8	511.1	510.5	509.9	509.3
172.5°	514.0	514.5	515.1	515.1	514.4	513.9	513.4	512.8
175°	517.5	518.2	518.7	518.6	518.0	517.4	516.7	516.1
177.5°	519.2	519.7	520.1	520.0	519.6	519.1	518.5	518.1
180°	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3

(END OF REPORT)