

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: P333342-940

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333342-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
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-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2974.2 lumens
Efficiency: N/A
Efficacy: 129.3 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

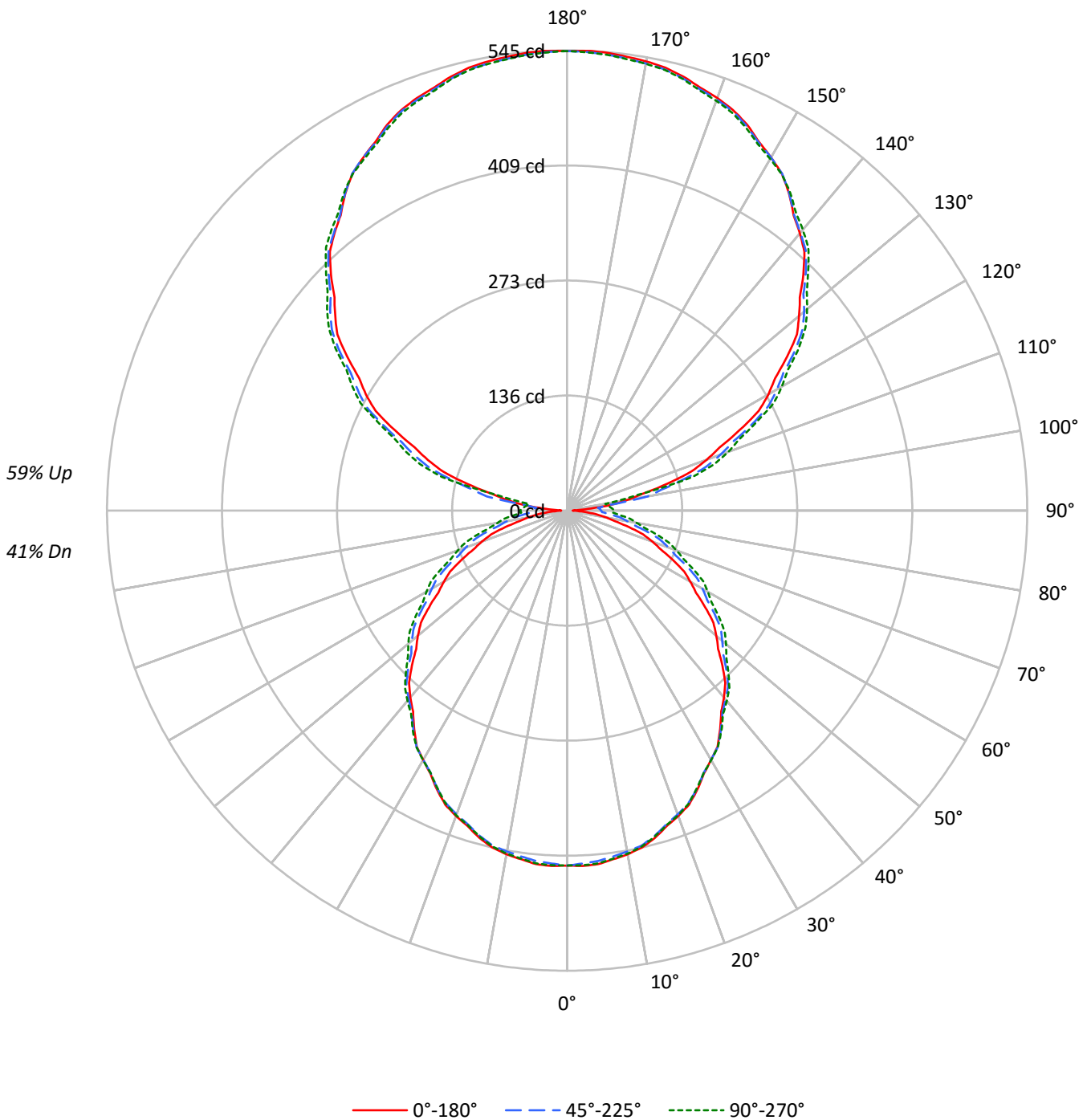
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333342-940

CATALOG NUMBER: S125DIW-S375D470U940-4F0-1E-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	105	105	105	105	96	96	96	96	78	78	78	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	52	51	41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	52	47	44	42	36	34	33	27
3	79	69	62	56	71	63	57	51	52	47	43	41	38	35	32	29	27	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	23	20
5	66	54	46	40	60	50	42	37	41	35	31	33	29	26	25	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	39	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	11	9

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.3
10°-20°	112.8	3.8
20°-30°	167.8	5.6
30°-40°	198.8	6.7
40°-50°	205.5	6.9
50°-60°	189.3	6.4
60°-70°	153.0	5.1
70°-80°	102.5	3.4
80°-90°	54.3	1.8
90°-100°	49.6	1.7
100°-110°	143.9	4.8
110°-120°	235.8	7.9
120°-130°	292.1	9.8
130°-140°	308.8	10.4
140°-150°	287.1	9.7
150°-160°	231.7	7.8
160°-170°	149.8	5.0
170°-180°	51.7	1.7
0°-30°	320.4	10.8
0°-40°	519.2	17.5
0°-60°	914.0	30.7
0°-90°	1223.8	41.1
90°-120°	429.3	14.4
90°-150°	1317.2	44.3
90°-180°	1750.0	58.8
0°-180°	2974.2	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	5
95°	28	37	37	47	50	34
105°	122	131	143	151	154	130
115°	225	230	241	247	247	223
125°	318	321	329	334	335	284
135°	396	398	400	404	404	305
145°	458	459	459	461	460	286
155°	504	502	503	504	501	232
165°	532	530	530	532	529	150
175°	544	542	542	545	542	52
180°	544	544	544	544	544	



TEST NUMBER: P333342-940

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

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	29.0	32.7	36.5	40.2	42.8
92.5°	12.1	14.4	16.6	18.8	21.0	24.0	27.7	31.5	35.2	39.0	41.4
95°	28.4	30.5	32.5	34.7	36.8	37.7	37.5	37.1	36.8	36.6	39.0
97.5°	52.9	55.5	58.1	60.7	63.4	62.9	59.1	55.4	51.6	47.9	47.3
100°	71.9	74.1	76.3	78.5	80.7	83.4	86.7	90.0	93.3	96.6	85.2
102.5°	91.2	93.4	95.5	97.6	99.7	102.3	105.4	108.4	111.6	114.6	114.0
105°	122.3	124.1	126.0	127.8	129.6	131.9	134.6	137.4	140.2	142.9	144.7
107.5°	154.5	155.8	157.0	158.3	159.5	161.6	164.4	167.2	170.0	172.8	174.7
110°	175.6	176.6	177.7	178.9	179.9	181.8	184.6	187.3	190.1	192.9	194.3



TEST NUMBER: P333342-940

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	195.6	196.6	197.8	198.9	199.9	201.8	204.4	207.0	209.6	212.1	213.5
115°	225.2	226.2	227.3	228.5	229.5	231.3	233.7	236.2	238.7	241.2	242.5
117.5°	255.8	256.2	256.6	257.0	257.4	259.0	261.5	264.1	266.7	269.3	270.4
120°	275.2	275.4	275.5	275.7	275.9	277.1	279.6	282.0	284.3	286.7	288.0
122.5°	291.9	292.4	292.8	293.4	293.8	295.2	297.3	299.4	301.6	303.8	305.1
125°	318.3	318.9	319.4	319.9	320.5	321.6	323.5	325.3	327.2	329.0	330.1
127.5°	343.1	343.5	343.8	344.2	344.6	345.4	347.0	348.4	349.8	351.2	352.4
130°	358.6	359.0	359.4	359.7	360.1	361.0	362.3	363.7	365.1	366.4	367.5
132.5°	373.8	374.3	374.8	375.3	375.9	376.5	377.3	378.1	378.8	379.6	380.8
135°	395.7	396.2	396.6	397.1	397.5	398.0	398.4	399.0	399.4	399.8	400.8
137.5°	415.9	416.3	416.7	417.1	417.5	417.8	417.9	418.0	418.2	418.4	419.5
140°	428.8	429.0	429.2	429.4	429.5	429.6	429.6	429.6	429.6	429.6	430.8
142.5°	440.8	440.8	440.9	440.9	440.9	441.0	441.1	441.3	441.4	441.6	442.5
145°	458.3	458.3	458.4	458.5	458.6	458.7	458.7	458.7	458.7	458.7	459.2
147.5°	473.2	473.1	473.1	473.1	473.1	473.1	473.2	473.3	473.4	473.5	473.8
150°	482.9	482.7	482.5	482.3	482.1	482.1	482.3	482.5	482.7	482.9	483.0
152.5°	492.2	491.9	491.4	491.1	490.6	490.5	490.7	490.9	491.1	491.2	491.4
155°	504.3	503.7	503.2	502.7	502.1	501.9	502.1	502.3	502.5	502.7	502.9
157.5°	513.5	513.2	512.9	512.6	512.2	512.1	512.1	512.1	512.1	512.2	512.5
160°	520.0	519.4	518.9	518.4	517.8	517.6	517.7	517.8	517.9	518.0	518.4
162.5°	525.1	524.6	524.1	523.5	523.0	522.8	522.9	523.0	523.1	523.2	523.6
165°	532.1	531.5	531.0	530.5	529.9	529.7	529.8	529.9	529.9	530.0	530.6
167.5°	537.3	536.7	536.2	535.6	535.0	534.8	534.8	534.9	535.0	535.1	535.8
170°	540.2	539.6	538.9	538.2	537.6	537.3	537.4	537.5	537.6	537.7	538.4
172.5°	542.1	541.4	540.8	540.2	539.6	539.4	539.5	539.7	539.8	540.0	540.6
175°	544.2	543.7	543.1	542.6	542.1	541.8	541.9	542.0	542.1	542.2	542.9
177.5°	545.2	544.7	544.3	543.9	543.4	543.2	543.3	543.4	543.5	543.6	544.0
180°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2



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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	52.2	53.1	54.0	54.9	55.8
92.5°	43.9	46.4	48.9	50.5	51.3	52.0	52.8	53.5
95°	41.5	44.0	46.4	48.0	48.6	49.2	49.8	50.5
97.5°	46.6	46.0	45.5	45.5	46.1	46.7	47.3	48.0
100°	73.7	62.2	50.8	45.2	45.4	45.6	45.7	46.0
102.5°	113.2	112.5	111.9	108.8	103.3	97.7	92.1	86.6
105°	146.5	148.4	150.2	151.4	151.9	152.5	153.0	153.6
107.5°	176.6	178.3	180.2	181.3	181.6	181.8	182.2	182.4
110°	195.8	197.2	198.7	199.8	200.5	201.3	202.0	202.8



TEST NUMBER: P333342-940

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	214.8	216.2	217.5	218.4	218.9	219.5	220.0	220.4
115°	243.8	245.0	246.3	247.0	247.0	247.0	247.0	247.0
117.5°	271.4	272.6	273.7	274.4	274.8	275.2	275.5	276.0
120°	289.4	290.8	292.2	292.9	293.0	293.1	293.3	293.4
122.5°	306.4	307.6	309.0	309.7	309.7	309.7	309.8	309.8
125°	331.2	332.3	333.4	334.0	334.2	334.4	334.7	334.8
127.5°	353.6	354.7	355.9	356.4	356.3	356.1	356.1	355.9
130°	368.5	369.4	370.5	371.0	371.0	371.0	371.0	371.0
132.5°	382.1	383.3	384.5	385.1	385.0	385.0	385.0	384.9
135°	401.9	402.9	403.9	404.4	404.3	404.2	404.1	404.0
137.5°	420.6	421.7	422.8	423.4	423.2	423.1	423.0	422.9
140°	432.0	433.2	434.4	434.9	434.7	434.5	434.4	434.2
142.5°	443.4	444.3	445.1	445.5	445.3	445.1	445.0	444.9
145°	459.8	460.3	460.8	461.0	460.8	460.7	460.6	460.4
147.5°	474.0	474.3	474.6	474.4	473.9	473.5	473.0	472.5
150°	483.2	483.4	483.6	483.4	482.8	482.1	481.5	480.9
152.5°	491.6	491.8	492.0	491.8	491.2	490.5	489.9	489.3
155°	503.2	503.5	503.7	503.5	502.7	502.0	501.3	500.6
157.5°	512.7	513.0	513.3	513.1	512.4	511.7	511.0	510.2
160°	518.7	519.1	519.4	519.2	518.5	517.8	517.1	516.4
162.5°	524.1	524.7	525.1	525.0	524.2	523.4	522.6	521.8
165°	531.2	531.7	532.3	532.2	531.5	530.7	529.9	529.2
167.5°	536.5	537.1	537.7	537.7	536.8	536.0	535.2	534.4
170°	539.1	539.9	540.6	540.6	539.8	539.0	538.1	537.3
172.5°	541.3	541.9	542.6	542.5	541.7	540.9	540.1	539.3
175°	543.6	544.3	545.0	545.0	544.2	543.4	542.6	541.8
177.5°	544.6	545.0	545.5	545.5	544.9	544.4	543.8	543.2
180°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2

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