

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: P333342-930

Luminaire Tested: **S125DIW-S375D470U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333342-930  
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-S375D470U930-4F0-1E-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: 2719.4 lumens  
Efficiency: N/A  
Efficacy: 118.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

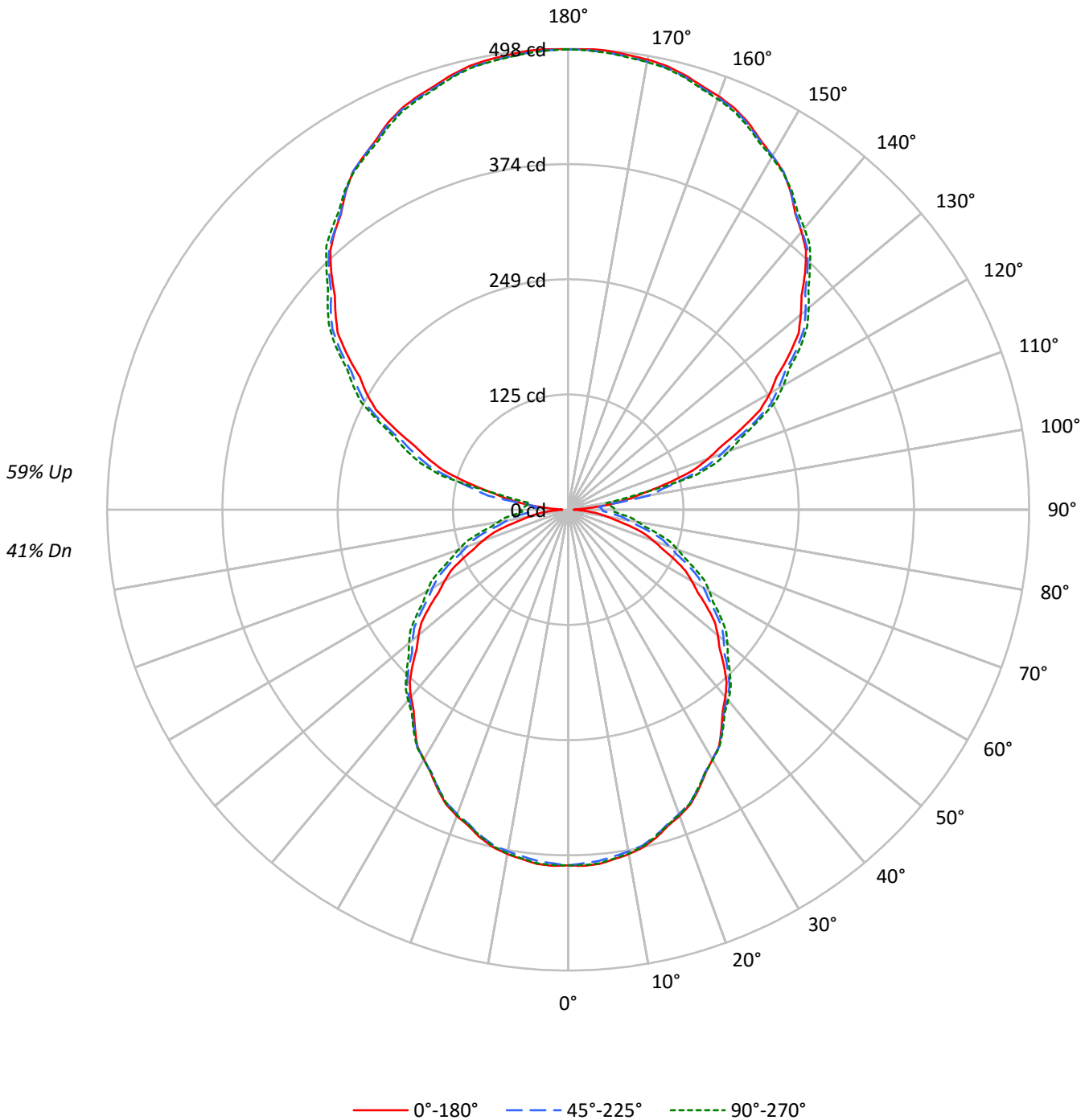
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P333342-930

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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	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°	2482	2482	2482
5°	2487	2436	2444
10°	2469	2393	2389
15°	2440	2341	2319
20°	2401	2276	2249
25°	2354	2207	2164
30°	2296	2132	2086
35°	2243	2062	2014
40°	2189	1989	1942
45°	2127	1926	1878
50°	2069	1858	1821
55°	1998	1793	1756
60°	1921	1720	1687
65°	1842	1644	1612
70°	1750	1538	1534
75°	1605	1438	1437
80°	1417	1316	1333
85°	1239	1232	1299



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.3	1.3
10°-20°	103.2	3.8
20°-30°	153.4	5.6
30°-40°	181.7	6.7
40°-50°	187.9	6.9
50°-60°	173.1	6.4
60°-70°	139.9	5.1
70°-80°	93.7	3.4
80°-90°	49.6	1.8
90°-100°	45.4	1.7
100°-110°	131.5	4.8
110°-120°	215.6	7.9
120°-130°	267.0	9.8
130°-140°	282.3	10.4
140°-150°	262.5	9.7
150°-160°	211.8	7.8
160°-170°	137.0	5.0
170°-180°	47.3	1.7
0°-30°	292.9	10.8
0°-40°	474.7	17.5
0°-60°	835.7	30.7
0°-90°	1118.9	41.1
90°-120°	392.5	14.4
90°-150°	1204.4	44.3
90°-180°	1600.0	58.8
0°-180°	2719.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	384	381	384	384	36
15°	367	367	365	367	366	103
25°	334	334	332	334	332	153
35°	289	291	290	291	291	181
45°	238	242	244	246	247	183
55°	183	189	195	199	200	163
65°	126	134	144	149	151	125
75°	69	79	91	98	101	74
85°	21	33	46	54	58	22
90°	6	21	37	47	51	5
95°	26	34	33	43	46	31
105°	112	120	131	138	140	119
115°	206	211	220	226	226	204
125°	291	294	301	305	306	260
135°	362	364	366	369	369	279
145°	419	419	419	421	421	262
155°	461	459	460	460	458	212
165°	486	484	485	487	484	137
175°	498	496	496	498	495	47
180°	498	498	498	498	498	



TEST NUMBER: P333342-930

CATALOG NUMBER: S125DIW-S375D470U930-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	385.2	385.1	385.0	384.8	384.7	384.4	383.9	383.4	383.0	382.5	383.0
5°	384.3	384.2	384.0	383.8	383.7	383.3	382.7	382.1	381.6	380.9	381.6
7.5°	380.9	380.9	380.8	380.7	380.7	380.3	379.8	379.1	378.5	377.9	378.5
10°	377.9	377.9	377.9	377.9	377.9	377.6	376.9	376.3	375.6	374.9	375.5
12.5°	373.7	373.8	373.8	373.9	374.0	373.7	373.2	372.7	372.1	371.6	372.0
15°	367.0	367.0	367.1	367.3	367.4	367.0	366.5	365.9	365.3	364.8	365.3
17.5°	358.2	358.4	358.6	358.7	358.9	358.7	358.2	357.5	356.9	356.4	356.8
20°	352.0	352.1	352.3	352.5	352.6	352.4	351.8	351.2	350.7	350.0	350.3
22.5°	344.7	345.0	345.3	345.6	345.9	345.7	345.0	344.4	343.7	343.1	343.4
25°	333.5	333.7	333.9	334.2	334.4	334.4	333.9	333.4	332.8	332.3	332.6
27.5°	321.0	321.3	321.7	322.0	322.5	322.4	321.8	321.2	320.7	320.1	320.2
30°	311.6	312.1	312.6	313.2	313.6	313.6	313.2	312.6	312.1	311.6	311.8
32.5°	303.2	303.6	304.0	304.5	304.9	304.9	304.6	304.2	303.9	303.5	303.6
35°	288.6	289.2	289.8	290.4	291.0	291.1	290.9	290.7	290.4	290.2	290.4
37.5°	274.1	274.6	275.2	275.7	276.2	276.5	276.4	276.3	276.2	276.1	276.5
40°	264.2	264.8	265.5	266.1	266.8	267.1	267.0	266.9	266.8	266.8	267.1
42.5°	253.3	254.1	255.0	255.9	256.7	257.3	257.5	257.6	257.9	258.0	258.4
45°	237.7	238.7	239.6	240.5	241.4	242.1	242.6	243.0	243.4	243.8	244.3
47.5°	221.8	222.7	223.6	224.5	225.3	226.1	226.8	227.5	228.2	228.9	229.8
50°	211.0	211.9	212.9	213.8	214.7	215.6	216.5	217.4	218.3	219.3	220.2
52.5°	199.6	200.6	201.8	202.9	204.1	205.1	206.3	207.4	208.6	209.6	210.7
55°	182.7	184.1	185.4	186.8	188.1	189.5	190.8	192.1	193.5	194.8	195.8
57.5°	165.6	167.1	168.8	170.4	172.0	173.6	175.1	176.7	178.2	179.7	180.8
60°	154.1	155.8	157.4	159.1	160.8	162.5	164.1	165.8	167.5	169.2	170.4
62.5°	142.9	144.6	146.3	148.0	149.7	151.4	153.2	155.0	156.9	158.7	160.0
65°	125.9	127.8	129.7	131.6	133.5	135.5	137.5	139.6	141.5	143.6	144.8
67.5°	109.7	111.6	113.4	115.3	117.2	119.1	121.2	123.2	125.2	127.3	128.8
70°	98.0	99.9	101.8	103.7	105.7	107.7	109.9	112.1	114.2	116.4	118.1
72.5°	86.5	88.5	90.5	92.5	94.5	96.7	99.1	101.4	103.8	106.2	107.9
75°	69.3	71.5	73.7	75.8	78.0	80.5	83.2	85.9	88.5	91.2	92.9
77.5°	52.8	55.4	57.9	60.3	62.9	65.4	68.0	70.6	73.1	75.7	77.6
80°	42.6	45.1	47.6	50.1	52.6	55.3	58.1	61.0	63.8	66.7	68.6
82.5°	33.3	35.9	38.6	41.2	43.8	46.6	49.5	52.4	55.4	58.2	60.0
85°	20.7	23.5	26.3	29.0	31.8	34.7	37.6	40.5	43.5	46.3	48.2
87.5°	11.8	14.7	17.4	20.3	23.1	25.9	28.9	31.9	34.8	37.8	39.8
90°	6.4	9.7	13.0	16.4	19.7	23.2	26.5	29.9	33.3	36.8	39.1
92.5°	11.1	13.1	15.2	17.2	19.2	21.9	25.4	28.8	32.2	35.6	37.8
95°	25.9	27.9	29.8	31.7	33.7	34.5	34.2	33.9	33.7	33.4	35.6
97.5°	48.3	50.7	53.2	55.5	58.0	57.5	54.1	50.6	47.2	43.8	43.2
100°	65.7	67.8	69.8	71.7	73.8	76.2	79.2	82.3	85.3	88.3	77.9
102.5°	83.4	85.4	87.3	89.3	91.2	93.5	96.4	99.1	102.0	104.8	104.2
105°	111.9	113.5	115.2	116.8	118.5	120.6	123.1	125.6	128.2	130.6	132.3
107.5°	141.3	142.4	143.6	144.7	145.9	147.7	150.3	152.9	155.5	158.0	159.7
110°	160.5	161.5	162.5	163.5	164.5	166.2	168.8	171.3	173.8	176.3	177.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	178.8	179.8	180.8	181.8	182.8	184.5	186.9	189.2	191.6	194.0	195.2
115°	205.9	206.8	207.8	208.9	209.9	211.5	213.7	216.0	218.3	220.5	221.7
117.5°	233.9	234.2	234.6	235.0	235.4	236.8	239.1	241.5	243.9	246.2	247.2
120°	251.6	251.8	251.9	252.1	252.3	253.4	255.6	257.8	259.9	262.1	263.3
122.5°	266.9	267.3	267.7	268.2	268.6	269.9	271.8	273.8	275.7	277.8	278.9
125°	291.1	291.6	292.0	292.5	293.0	294.1	295.8	297.4	299.1	300.8	301.8
127.5°	313.7	314.1	314.4	314.7	315.0	315.8	317.2	318.5	319.8	321.1	322.2
130°	327.9	328.2	328.6	328.9	329.2	330.0	331.3	332.6	333.8	335.0	336.0
132.5°	341.8	342.3	342.7	343.2	343.6	344.2	345.0	345.7	346.3	347.1	348.2
135°	361.8	362.2	362.6	363.1	363.5	363.9	364.3	364.8	365.2	365.6	366.5
137.5°	380.3	380.7	381.0	381.4	381.7	382.0	382.1	382.2	382.4	382.5	383.5
140°	392.1	392.2	392.4	392.6	392.7	392.8	392.8	392.8	392.8	392.8	393.9
142.5°	403.0	403.0	403.1	403.1	403.1	403.2	403.3	403.5	403.6	403.7	404.6
145°	419.0	419.1	419.1	419.2	419.3	419.4	419.4	419.4	419.4	419.4	419.9
147.5°	432.7	432.6	432.6	432.5	432.5	432.5	432.7	432.8	432.8	432.9	433.2
150°	441.5	441.3	441.2	441.0	440.8	440.8	441.0	441.2	441.3	441.5	441.6
152.5°	450.0	449.7	449.3	449.0	448.6	448.5	448.7	448.8	449.0	449.1	449.3
155°	461.1	460.6	460.1	459.6	459.1	458.9	459.1	459.3	459.4	459.6	459.8
157.5°	469.5	469.2	469.0	468.6	468.3	468.2	468.2	468.2	468.2	468.3	468.6
160°	475.4	474.9	474.4	473.9	473.4	473.3	473.4	473.4	473.5	473.6	473.9
162.5°	480.1	479.6	479.2	478.7	478.2	478.0	478.1	478.2	478.3	478.3	478.7
165°	486.5	486.0	485.5	485.0	484.5	484.3	484.4	484.5	484.5	484.6	485.1
167.5°	491.2	490.7	490.2	489.7	489.2	488.9	489.0	489.1	489.2	489.3	489.9
170°	493.9	493.3	492.7	492.1	491.5	491.3	491.4	491.5	491.5	491.6	492.3
172.5°	495.6	495.0	494.5	493.9	493.3	493.2	493.3	493.4	493.6	493.7	494.3
175°	497.6	497.1	496.6	496.1	495.6	495.4	495.5	495.5	495.6	495.7	496.4
177.5°	498.5	498.1	497.7	497.3	496.8	496.7	496.8	496.8	496.9	497.0	497.4
180°	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	383.4	383.9	384.4	384.6	384.5	384.5	384.4	384.3
5°	382.3	382.9	383.6	383.9	383.8	383.8	383.7	383.6
7.5°	379.1	379.7	380.3	380.5	380.4	380.3	380.3	380.2
10°	376.1	376.7	377.2	377.5	377.4	377.3	377.2	377.2
12.5°	372.5	372.9	373.4	373.5	373.3	373.1	372.8	372.7
15°	365.7	366.2	366.7	366.8	366.5	366.2	365.8	365.5
17.5°	357.2	357.5	357.9	358.0	357.8	357.6	357.4	357.2
20°	350.6	350.8	351.1	351.1	351.1	351.1	351.1	351.1
22.5°	343.7	344.1	344.4	344.5	344.2	344.1	343.8	343.6
25°	333.0	333.4	333.7	333.6	333.2	332.8	332.4	332.0
27.5°	320.5	320.7	321.0	321.1	320.9	320.7	320.6	320.4
30°	311.9	312.1	312.3	312.3	312.3	312.2	312.1	312.0
32.5°	303.8	303.9	304.1	304.2	304.1	304.0	303.9	303.9
35°	290.7	290.9	291.1	291.2	291.2	291.2	291.2	291.2
37.5°	276.8	277.1	277.4	277.6	277.6	277.5	277.5	277.4
40°	267.4	267.7	268.2	268.4	268.6	268.7	268.9	269.0
42.5°	258.9	259.3	259.7	259.8	259.9	259.9	259.9	260.0
45°	245.0	245.6	246.1	246.5	246.5	246.6	246.7	246.8
47.5°	230.6	231.5	232.4	232.8	233.1	233.3	233.4	233.6
50°	221.1	222.1	223.0	223.6	223.8	224.0	224.3	224.5
52.5°	211.7	212.6	213.6	214.2	214.3	214.6	214.7	214.9
55°	196.7	197.5	198.5	199.1	199.4	199.7	200.2	200.5
57.5°	181.8	182.9	183.9	184.6	184.8	185.1	185.4	185.6
60°	171.7	172.9	174.2	175.0	175.2	175.5	175.7	175.9
62.5°	161.4	162.8	164.2	165.0	165.3	165.7	166.0	166.3
65°	146.1	147.3	148.5	149.4	149.7	150.0	150.4	150.7
67.5°	130.4	131.8	133.4	134.4	134.8	135.3	135.7	136.1
70°	119.6	121.2	122.8	123.8	124.3	124.8	125.3	125.9
72.5°	109.7	111.4	113.1	114.1	114.5	114.9	115.2	115.6
75°	94.6	96.2	97.9	98.9	99.4	99.8	100.2	100.6
77.5°	79.4	81.3	83.1	84.2	84.5	84.9	85.2	85.5
80°	70.4	72.2	74.0	75.2	75.5	75.8	76.1	76.5
82.5°	61.8	63.6	65.4	66.5	67.2	67.8	68.3	69.0
85°	50.1	51.9	53.7	55.0	55.6	56.3	57.0	57.6
87.5°	41.8	43.9	45.8	47.1	47.8	48.4	49.1	49.7
90°	41.5	43.8	46.1	47.7	48.6	49.4	50.2	51.0
92.5°	40.1	42.4	44.7	46.1	46.9	47.5	48.3	48.9
95°	37.9	40.2	42.4	43.9	44.4	45.0	45.6	46.1
97.5°	42.6	42.1	41.6	41.6	42.2	42.7	43.3	43.9
100°	67.3	56.9	46.5	41.3	41.5	41.7	41.8	42.1
102.5°	103.5	102.9	102.3	99.5	94.4	89.4	84.2	79.2
105°	134.0	135.7	137.3	138.4	138.9	139.4	139.9	140.5
107.5°	161.4	163.1	164.8	165.8	166.0	166.2	166.6	166.8
110°	179.0	180.3	181.6	182.7	183.4	184.0	184.7	185.4





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CATALOG NUMBER: S125DIW-S375D470U930-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	196.4	197.6	198.9	199.7	200.2	200.6	201.1	201.5
115°	222.9	224.0	225.2	225.8	225.8	225.8	225.8	225.8
117.5°	248.2	249.2	250.2	250.9	251.3	251.6	251.9	252.3
120°	264.6	265.9	267.2	267.8	267.9	268.0	268.2	268.2
122.5°	280.1	281.3	282.5	283.2	283.2	283.2	283.2	283.2
125°	302.8	303.8	304.8	305.4	305.6	305.7	306.0	306.1
127.5°	323.3	324.3	325.4	325.9	325.8	325.6	325.5	325.4
130°	336.9	337.8	338.8	339.2	339.2	339.2	339.2	339.2
132.5°	349.4	350.5	351.6	352.1	352.0	352.0	352.0	351.9
135°	367.5	368.4	369.2	369.7	369.7	369.6	369.5	369.4
137.5°	384.6	385.6	386.6	387.1	386.9	386.9	386.8	386.7
140°	395.0	396.1	397.1	397.6	397.5	397.3	397.1	397.0
142.5°	405.4	406.2	407.0	407.3	407.2	407.0	406.8	406.8
145°	420.4	420.9	421.3	421.5	421.3	421.3	421.1	420.9
147.5°	433.4	433.7	433.9	433.7	433.3	432.9	432.4	432.0
150°	441.8	442.0	442.1	442.0	441.4	440.8	440.3	439.7
152.5°	449.5	449.6	449.8	449.6	449.1	448.5	447.9	447.4
155°	460.1	460.3	460.6	460.3	459.7	459.0	458.4	457.7
157.5°	468.8	469.0	469.3	469.1	468.5	467.8	467.2	466.5
160°	474.3	474.6	474.9	474.7	474.1	473.4	472.8	472.1
162.5°	479.2	479.7	480.1	480.0	479.3	478.6	477.8	477.1
165°	485.7	486.2	486.7	486.6	485.9	485.2	484.5	483.9
167.5°	490.5	491.1	491.6	491.6	490.8	490.1	489.3	488.6
170°	492.9	493.7	494.3	494.2	493.5	492.8	492.0	491.3
172.5°	494.9	495.5	496.1	496.0	495.3	494.6	493.8	493.1
175°	497.0	497.7	498.3	498.3	497.6	496.8	496.1	495.4
177.5°	497.9	498.3	498.8	498.8	498.2	497.7	497.2	496.7
180°	497.6	497.6	497.6	497.6	497.6	497.6	497.6	497.6

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