

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: P333120-840

Luminaire Tested: **S125DIP-S375D365U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333120-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S375D365U840-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2803.0 lumens
Efficiency: N/A
Efficacy: 138.1 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

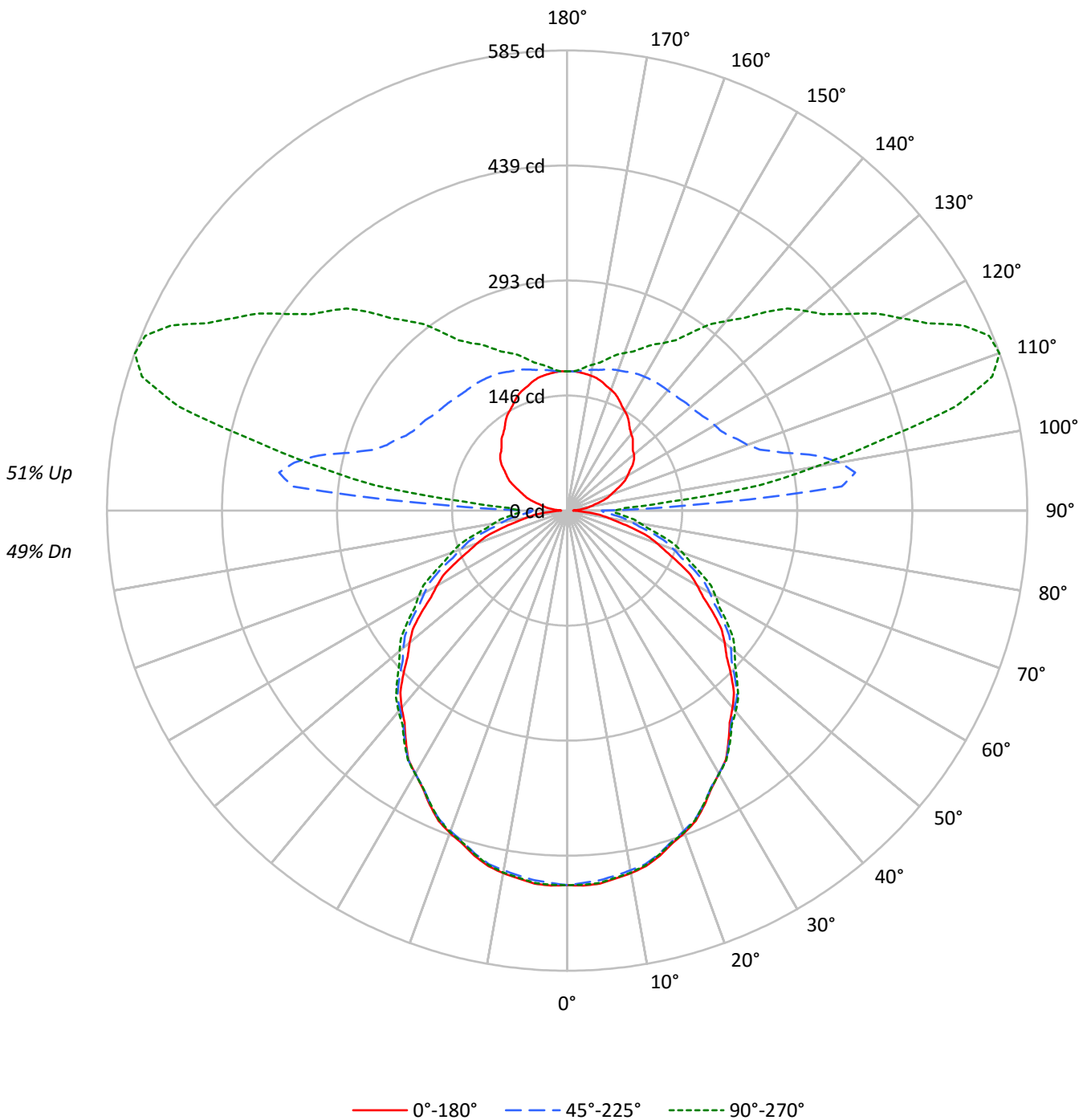
Input Watts (W): 20.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333120-840

CATALOG NUMBER: S125DIP-S375D365U840-4F0-1E-UDD-D4

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	97	92	88	84	89	85	82	78	72	69	67	59	57	56	48	47	45	40
2	88	80	74	68	81	74	68	64	62	58	55	52	49	46	42	40	38	33
3	80	70	63	57	73	65	58	53	55	50	46	45	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	40	36	33	33	30	27	23
5	67	55	47	41	61	51	44	38	43	38	33	36	32	28	29	26	24	20
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	23	21	18
7	57	44	36	31	52	41	34	29	35	30	25	30	25	22	24	21	18	16
8	53	40	32	27	49	38	30	26	32	26	22	27	23	19	22	19	16	14
9	49	37	29	24	45	34	27	23	29	24	20	25	20	17	21	17	15	13
10	46	34	26	22	42	31	25	20	27	22	18	23	19	16	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



TEST NUMBER: P333120-840

CATALOG NUMBER: S125DIP-S375D365U840-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	1.6
10°-20°	127.8	4.6
20°-30°	190.0	6.8
30°-40°	225.1	8.0
40°-50°	232.7	8.3
50°-60°	214.4	7.6
60°-70°	173.3	6.2
70°-80°	116.1	4.1
80°-90°	61.2	2.2
90°-100°	162.1	5.8
100°-110°	300.7	10.7
110°-120°	275.6	9.8
120°-130°	219.3	7.8
130°-140°	172.5	6.2
140°-150°	127.9	4.6
150°-160°	89.4	3.2
160°-170°	52.7	1.9
170°-180°	17.1	0.6
0°-30°	362.8	12.9
0°-40°	587.9	21.0
0°-60°	1035.1	36.9
0°-90°	1385.6	49.4
90°-120°	738.4	26.3
90°-150°	1258.0	44.9
90°-180°	1417.0	50.6
0°-180°	2803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	26	44	56	60	6
95°	18	53	350	187	132	17
105°	44	68	284	544	511	47
115°	75	94	226	474	556	74
125°	102	119	210	374	436	90
135°	118	141	202	308	357	92
145°	137	156	198	249	276	86
155°	156	167	194	219	228	72
165°	170	175	186	197	200	48
175°	177	177	178	180	180	17
180°	177	177	177	177	177	



TEST NUMBER: P333120-840

CATALOG NUMBER: S125DIP-S375D365U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.6	18.0	21.5	24.9	28.4	32.0	35.5	39.3	42.8	46.6	49.0
90°	7.8	11.5	15.6	19.6	23.6	27.8	31.6	35.9	39.8	44.0	46.8
92.5°	11.1	15.0	21.1	28.7	37.9	51.6	74.7	111.0	150.1	151.9	132.2
95°	17.9	20.9	26.5	33.0	43.6	62.8	104.5	186.5	288.6	350.3	345.8
97.5°	25.0	27.9	32.3	38.7	48.2	62.7	91.3	152.3	258.7	369.4	425.5
100°	30.1	33.0	36.7	42.7	51.7	65.1	89.2	138.9	232.2	352.1	443.5
102.5°	35.7	38.2	41.3	47.6	55.7	68.9	90.5	132.7	211.9	323.6	430.0
105°	44.5	46.2	49.6	54.8	62.2	74.6	93.4	128.3	191.0	284.4	388.9
107.5°	53.1	55.2	58.4	62.7	70.0	81.2	99.4	129.6	181.2	257.1	347.6
110°	59.3	61.3	63.9	68.4	75.0	86.3	103.9	131.4	177.5	243.9	323.7



TEST NUMBER: P333120-840

CATALOG NUMBER: S125DIP-S375D365U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	65.8	67.6	69.7	73.9	80.3	91.2	108.1	134.1	176.1	235.6	305.6
115°	74.9	76.3	78.2	82.1	88.2	98.8	114.7	138.0	175.0	225.9	285.3
117.5°	83.0	84.5	86.1	89.9	96.4	106.5	121.6	143.0	175.3	220.0	272.2
120°	88.7	90.1	91.8	95.3	101.7	112.0	126.8	146.4	176.2	216.8	264.6
122.5°	94.3	95.2	96.5	99.9	106.6	116.8	131.6	150.2	176.8	213.9	257.9
125°	101.8	102.4	104.1	107.2	113.9	124.1	137.9	155.4	178.1	209.8	248.6
127.5°	107.2	108.3	110.4	114.4	121.5	131.6	144.6	160.5	180.2	206.9	239.9
130°	111.0	111.9	114.7	119.3	126.6	136.5	149.1	164.1	181.6	205.2	234.5
132.5°	113.4	114.8	118.2	123.4	131.2	141.0	153.2	166.9	183.0	203.7	229.5
135°	118.0	119.4	123.5	129.1	136.5	146.4	158.2	170.8	184.7	201.5	223.2
137.5°	123.7	124.7	128.7	134.3	141.6	151.6	162.0	173.7	186.6	200.2	217.7
140°	126.8	127.8	132.2	137.8	144.6	154.3	164.8	175.6	187.1	199.3	214.8
142.5°	130.8	131.5	135.4	141.1	147.4	156.5	166.3	176.4	187.3	198.9	212.5
145°	136.8	137.4	140.9	145.7	152.1	160.3	169.6	178.4	188.0	198.4	209.6
147.5°	142.6	143.0	146.1	150.8	156.3	163.5	171.7	179.8	188.4	197.5	207.1
150°	146.3	147.0	149.6	154.2	159.2	165.2	173.1	180.6	188.4	196.6	205.2
152.5°	150.4	150.8	153.0	157.0	161.8	167.2	174.5	181.2	188.1	195.5	203.2
155°	155.6	155.6	157.7	161.3	164.9	169.9	175.9	181.7	187.3	193.5	199.9
157.5°	160.4	160.3	162.0	165.0	168.1	172.0	177.1	182.0	186.4	191.3	196.7
160°	163.5	163.1	164.5	167.0	169.9	173.1	177.7	182.0	185.6	189.9	194.2
162.5°	166.0	165.7	167.1	169.4	171.6	174.2	178.3	181.8	184.7	188.1	191.9
165°	169.9	169.2	170.3	172.0	173.5	175.6	178.4	181.3	183.5	185.6	188.4
167.5°	172.5	172.1	172.8	173.7	174.7	176.1	178.4	180.5	181.5	183.1	185.1
170°	174.2	173.8	174.2	174.9	175.6	176.6	178.4	179.9	180.6	181.7	183.1
172.5°	175.3	174.7	175.0	175.7	176.1	176.6	178.1	179.4	179.5	180.0	181.1
175°	176.6	175.9	176.3	176.6	176.6	176.6	177.7	178.4	178.1	178.1	178.4
177.5°	177.3	176.7	176.7	177.0	176.7	176.7	177.3	177.6	177.0	177.0	177.3
180°	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0



TEST NUMBER: P333120-840

CATALOG NUMBER: S125DIP-S375D365U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	51.4	53.9	56.4	58.1	58.8	59.5	60.3	61.0
90°	49.5	52.2	54.9	57.3	58.0	58.7	59.8	60.5
92.5°	104.6	89.6	80.5	76.7	72.9	72.8	73.0	73.2
95°	295.3	243.3	201.7	173.2	148.6	138.6	136.4	131.5
97.5°	418.3	382.4	341.8	301.5	280.2	260.9	251.3	247.4
100°	473.2	457.9	423.3	387.6	363.6	338.5	326.0	320.8
102.5°	490.7	503.5	488.1	464.2	438.6	420.9	407.2	403.5
105°	476.7	527.7	545.4	542.9	532.2	521.1	514.7	511.2
107.5°	434.1	501.4	543.8	563.8	570.2	570.8	569.1	566.8
110°	402.7	472.5	524.8	556.5	573.3	580.8	584.0	584.8



TEST NUMBER: P333120-840

CATALOG NUMBER: S125DIP-S375D365U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	377.7	443.9	496.8	533.8	558.1	570.4	577.3	580.6
115°	346.0	403.1	453.9	494.1	522.6	540.3	550.9	556.2
117.5°	324.6	374.1	417.9	454.8	483.3	501.8	512.4	515.9
120°	312.8	357.4	398.4	431.0	458.1	475.7	486.0	489.5
122.5°	303.5	344.8	381.4	412.0	436.2	452.5	462.8	466.0
125°	289.9	328.0	360.7	387.5	408.0	423.1	431.5	435.7
127.5°	276.1	311.6	342.1	367.3	386.0	399.5	407.6	409.7
130°	267.7	300.5	329.8	354.1	372.4	384.7	392.3	395.0
132.5°	259.0	289.9	316.7	339.9	358.2	370.4	377.4	380.3
135°	247.3	273.3	297.5	318.8	335.0	347.3	354.3	356.9
137.5°	237.5	258.7	278.9	297.0	311.4	322.6	328.9	331.7
140°	232.0	249.9	267.4	283.3	296.9	306.5	312.4	314.5
142.5°	227.2	242.4	257.5	271.1	282.8	291.0	296.5	298.4
145°	221.3	232.9	244.4	254.5	263.5	269.9	274.3	276.2
147.5°	216.0	225.1	233.8	241.3	248.2	253.3	255.7	256.6
150°	213.1	221.0	227.7	234.2	239.6	244.0	245.6	246.0
152.5°	210.3	217.2	223.4	228.4	233.0	236.4	237.8	238.2
155°	205.9	211.7	216.6	220.6	224.1	226.6	227.7	228.0
157.5°	201.7	206.3	210.3	213.3	216.1	218.1	219.1	219.0
160°	198.8	202.4	205.9	208.4	211.0	212.7	213.4	213.1
162.5°	195.6	198.9	202.0	204.2	206.1	207.5	207.7	207.6
165°	191.3	193.8	195.9	197.7	199.1	199.9	199.9	199.9
167.5°	187.1	188.8	190.5	191.8	192.5	193.1	192.8	192.7
170°	184.9	185.9	187.0	187.7	188.4	188.8	188.8	188.4
172.5°	182.3	183.4	184.2	184.6	184.7	185.4	184.8	184.4
175°	179.6	179.6	180.3	180.3	180.3	180.6	179.9	179.6
177.5°	177.6	177.8	177.8	177.8	177.6	177.8	177.0	177.0
180°	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0

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