

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: P333209-940

Luminaire Tested: **S125DIP-S850D365U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333209-940
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: S125DIP-S850D365U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4056.8 lumens
Efficiency: N/A
Efficacy: 115.9 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: Semi-Direct

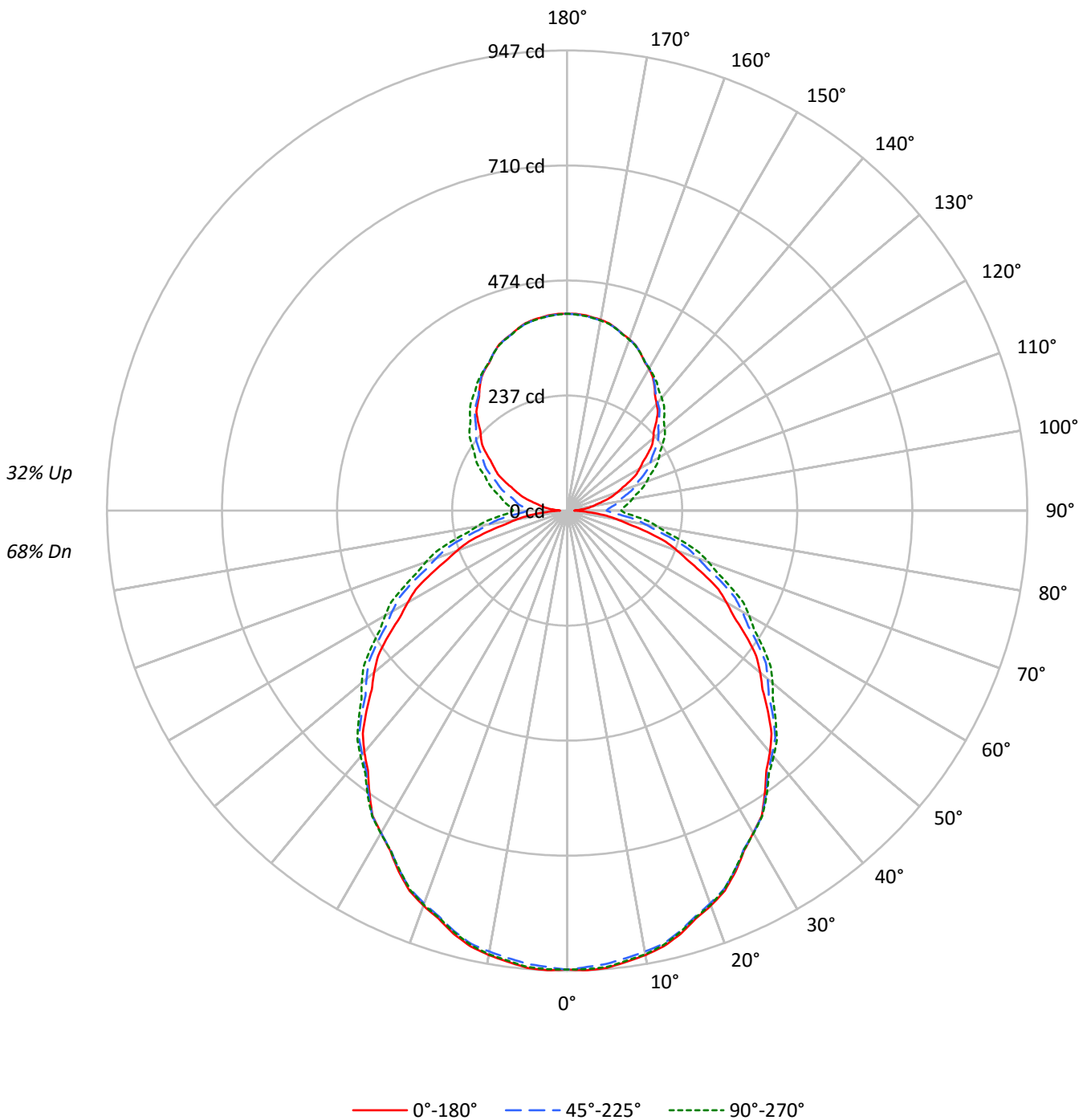
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	68
1	101	96	91	88	95	90	87	83	80	77	75	71	69	67	62	61	59	55
2	91	83	76	71	86	79	73	67	70	65	61	62	58	55	54	52	49	45
3	83	73	65	59	78	69	62	56	61	56	51	54	50	46	48	44	41	38
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	43	39	35	32
5	70	57	49	42	65	54	46	41	49	42	37	43	38	34	38	34	31	28
6	64	51	43	37	60	49	41	35	44	37	32	39	34	30	35	30	27	24
7	59	46	38	32	56	44	36	31	40	33	29	36	30	26	32	27	24	21
8	55	42	34	28	52	40	33	27	36	30	25	33	27	23	29	25	21	19
9	51	39	31	25	48	37	30	25	33	27	23	30	25	21	27	22	19	17
10	48	35	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6101	6101	6101
5°	6113	5988	6007
10°	6069	5881	5872
15°	5998	5753	5701
20°	5900	5595	5529
25°	5784	5425	5318
30°	5644	5239	5126
35°	5513	5068	4951
40°	5379	4888	4773
45°	5228	4733	4617
50°	5084	4566	4479
55°	4912	4408	4315
60°	4722	4227	4149
65°	4525	4039	3961
70°	4301	3780	3769
75°	3945	3533	3533
80°	3483	3233	3276
85°	3046	3031	3195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	2.2
10°-20°	253.6	6.3
20°-30°	377.1	9.3
30°-40°	446.7	11.0
40°-50°	461.8	11.4
50°-60°	425.4	10.5
60°-70°	343.9	8.5
70°-80°	230.3	5.7
80°-90°	120.3	3.0
90°-100°	94.1	2.3
100°-110°	129.5	3.2
110°-120°	168.8	4.2
120°-130°	197.4	4.9
130°-140°	208.3	5.1
140°-150°	197.8	4.9
150°-160°	164.7	4.1
160°-170°	109.5	2.7
170°-180°	38.3	0.9
0°-30°	720.0	17.7
0°-40°	1166.7	28.8
0°-60°	2053.9	50.6
0°-90°	2748.4	67.7
90°-120°	392.5	9.7
90°-150°	995.8	24.5
90°-180°	1308.0	32.2
0°-180°	4056.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	945	942	936	943	943	90
15°	902	903	896	902	898	254
25°	820	822	817	820	816	377
35°	709	715	713	716	716	444
45°	584	594	599	605	607	451
55°	449	464	479	489	493	401
65°	309	331	353	366	370	307
75°	170	195	224	242	247	181
85°	51	82	114	134	142	54
90°	15	47	81	103	111	11
95°	32	58	92	114	122	31
105°	80	97	126	146	154	86
115°	141	150	174	190	196	140
125°	202	204	222	235	240	181
135°	260	261	267	279	283	200
145°	313	314	314	319	322	196
155°	357	357	358	359	357	165
165°	389	388	388	389	388	110
175°	404	403	403	404	402	38
180°	405	405	405	405	405	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	946.8	946.6	946.2	945.8	945.5	944.8	943.6	942.4	941.3	940.1	941.3
5°	944.6	944.2	943.8	943.3	943.0	942.0	940.6	939.1	937.7	936.3	937.9
7.5°	936.3	936.1	935.9	935.8	935.6	934.8	933.4	931.8	930.3	928.9	930.3
10°	928.9	928.9	928.9	928.9	928.9	928.1	926.4	924.8	923.1	921.5	922.9
12.5°	918.5	918.6	918.8	919.0	919.2	918.6	917.3	916.0	914.6	913.3	914.4
15°	902.1	902.2	902.4	902.6	902.9	902.2	900.8	899.4	897.9	896.4	897.7
17.5°	880.6	880.9	881.4	881.7	882.2	881.6	880.2	878.8	877.4	875.9	876.8
20°	865.0	865.4	865.8	866.2	866.7	866.1	864.7	863.3	861.7	860.3	860.9
22.5°	847.2	847.9	848.6	849.4	850.2	849.7	848.1	846.5	844.9	843.3	844.1
25°	819.6	820.2	820.8	821.4	822.1	821.7	820.6	819.3	818.1	816.8	817.6
27.5°	788.8	789.8	790.7	791.6	792.5	792.2	790.9	789.4	788.0	786.7	787.2
30°	765.9	767.1	768.4	769.5	770.8	770.8	769.5	768.4	767.1	765.9	766.3
32.5°	745.1	746.2	747.3	748.3	749.4	749.5	748.6	747.7	746.8	745.9	746.3
35°	709.4	710.9	712.3	713.7	715.2	715.6	715.0	714.3	713.7	713.1	713.7
37.5°	673.6	674.9	676.3	677.6	678.9	679.5	679.2	679.0	678.9	678.7	679.5
40°	649.2	650.9	652.5	654.2	655.8	656.5	656.3	656.1	655.9	655.7	656.5
42.5°	622.5	624.6	626.8	628.9	631.1	632.4	632.8	633.3	633.7	634.2	635.2
45°	584.3	586.7	588.9	591.1	593.4	595.0	596.1	597.1	598.2	599.1	600.7
47.5°	545.3	547.4	549.5	551.6	553.7	555.6	557.4	559.2	560.9	562.7	564.8
50°	518.6	520.8	523.2	525.4	527.6	529.9	532.2	534.5	536.7	539.0	541.3
52.5°	490.4	493.2	496.0	498.7	501.5	504.3	507.0	509.8	512.6	515.3	517.7
55°	449.2	452.5	455.8	459.1	462.4	465.7	469.0	472.3	475.5	478.8	481.1
57.5°	406.9	410.9	414.8	418.7	422.8	426.6	430.4	434.2	437.9	441.8	444.3
60°	378.8	382.9	387.0	391.1	395.2	399.4	403.5	407.6	411.7	415.8	418.9
62.5°	351.3	355.4	359.6	363.7	367.8	372.1	376.6	381.0	385.4	389.9	393.3
65°	309.3	314.1	318.8	323.5	328.2	333.1	338.0	343.0	347.9	352.8	356.0
67.5°	269.7	274.3	278.8	283.4	287.9	292.7	297.7	302.8	307.8	312.8	316.6
70°	240.8	245.5	250.2	255.0	259.8	264.7	270.1	275.4	280.8	286.1	290.1
72.5°	212.7	217.5	222.4	227.3	232.2	237.6	243.4	249.3	255.1	261.0	265.2
75°	170.4	175.8	181.1	186.5	191.8	197.8	204.4	211.0	217.5	224.1	228.2
77.5°	129.8	136.0	142.2	148.4	154.5	160.8	167.1	173.4	179.8	186.2	190.6
80°	104.7	110.8	117.0	123.1	129.4	135.9	142.9	149.9	156.9	163.9	168.4
82.5°	81.7	88.2	94.7	101.2	107.7	114.5	121.7	128.9	136.0	143.2	147.6
85°	50.9	57.7	64.6	71.3	78.1	85.1	92.3	99.5	106.7	113.9	118.4
87.5°	29.0	35.7	42.4	49.0	55.7	62.7	69.7	76.9	83.9	91.0	95.9
90°	15.2	22.3	29.4	36.6	43.7	51.0	58.5	66.0	73.5	81.0	86.1
92.5°	21.0	27.5	34.0	40.4	46.9	54.0	61.8	69.6	77.3	85.1	90.2
95°	32.5	38.0	43.5	49.0	54.5	61.1	68.8	76.5	84.2	91.8	96.9
97.5°	44.9	49.8	54.8	59.6	64.5	70.7	78.5	86.1	93.9	101.7	106.4
100°	54.3	58.7	63.0	67.2	71.6	77.5	85.0	92.5	100.0	107.5	112.4
102.5°	64.4	68.7	72.9	77.2	81.5	87.1	94.0	100.9	107.7	114.6	119.5
105°	80.2	83.8	87.5	91.1	94.8	99.9	106.5	113.1	119.7	126.3	130.8
107.5°	97.7	100.9	104.1	107.2	110.3	115.0	121.3	127.5	133.8	140.0	144.3
110°	109.9	112.7	115.5	118.3	121.1	125.6	131.5	137.5	143.5	149.5	153.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	123.0	125.1	127.2	129.5	131.6	135.6	141.5	147.3	153.2	159.1	162.9
115°	141.4	143.1	144.8	146.6	148.3	151.9	157.4	162.8	168.4	173.9	177.5
117.5°	159.9	161.0	162.0	163.1	164.2	167.3	172.5	177.7	182.9	188.1	191.6
120°	172.0	173.0	173.9	174.9	175.8	178.7	183.5	188.3	193.1	198.0	201.4
122.5°	184.3	184.8	185.2	185.6	186.0	188.6	193.3	198.1	202.9	207.6	210.9
125°	202.0	202.2	202.4	202.6	202.8	205.0	209.2	213.4	217.6	221.8	224.9
127.5°	219.9	220.0	220.0	220.0	220.1	221.8	225.2	228.7	232.2	235.7	238.6
130°	231.3	231.4	231.6	231.7	231.8	233.4	236.5	239.5	242.5	245.5	248.3
132.5°	241.9	242.5	242.9	243.4	244.0	245.4	247.5	249.8	252.0	254.1	257.0
135°	259.7	259.8	260.1	260.3	260.6	261.4	262.9	264.4	265.9	267.4	270.1
137.5°	276.3	276.6	276.9	277.1	277.3	277.9	278.7	279.6	280.4	281.3	283.8
140°	286.5	286.8	287.1	287.5	287.8	288.3	288.6	289.1	289.5	289.9	292.3
142.5°	297.3	297.5	297.6	297.7	297.8	298.0	298.4	298.6	299.0	299.3	301.3
145°	313.3	313.3	313.4	313.4	313.5	313.7	313.9	314.1	314.3	314.5	315.6
147.5°	327.1	327.3	327.3	327.5	327.7	327.9	328.1	328.2	328.3	328.5	329.0
150°	336.9	336.9	336.8	336.7	336.6	336.7	337.0	337.3	337.6	337.9	337.9
152.5°	345.0	345.1	345.2	345.3	345.4	345.4	345.6	345.7	345.8	345.9	346.1
155°	357.4	357.4	357.4	357.4	357.4	357.4	357.5	357.6	357.7	357.8	358.0
157.5°	368.5	368.4	368.2	368.0	367.9	367.8	367.9	368.0	368.0	368.1	368.4
160°	375.1	374.9	374.6	374.4	374.3	374.2	374.3	374.3	374.3	374.4	374.7
162.5°	380.8	380.7	380.6	380.4	380.2	380.1	380.1	380.2	380.2	380.2	380.6
165°	388.6	388.4	388.3	388.2	388.1	388.0	388.1	388.2	388.3	388.3	388.6
167.5°	395.1	394.8	394.6	394.3	394.0	393.9	393.9	393.9	393.9	393.9	394.3
170°	398.7	398.4	398.1	397.9	397.5	397.4	397.4	397.4	397.4	397.4	397.9
172.5°	401.2	400.9	400.6	400.4	400.1	399.9	399.9	399.9	399.9	399.9	400.4
175°	404.0	403.8	403.5	403.2	403.0	402.8	402.8	402.8	402.8	402.8	403.2
177.5°	405.5	405.3	405.0	404.8	404.6	404.5	404.4	404.4	404.3	404.2	404.6
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	942.4	943.6	944.8	945.3	945.1	944.9	944.8	944.6
5°	939.6	941.2	942.9	943.6	943.3	943.2	943.0	942.8
7.5°	931.7	933.2	934.6	935.2	935.0	934.9	934.6	934.4
10°	924.3	925.8	927.2	927.8	927.6	927.5	927.2	927.0
12.5°	915.5	916.7	917.7	918.0	917.5	916.9	916.4	915.9
15°	898.9	900.2	901.4	901.6	900.8	899.9	899.1	898.3
17.5°	877.8	878.8	879.7	879.9	879.4	879.0	878.4	878.0
20°	861.6	862.2	862.8	863.1	863.1	863.1	863.1	863.1
22.5°	844.9	845.6	846.4	846.6	846.1	845.6	845.1	844.6
25°	818.5	819.3	820.1	820.0	818.9	818.0	816.9	815.9
27.5°	787.7	788.4	788.9	789.1	788.6	788.3	787.9	787.6
30°	766.7	767.1	767.5	767.7	767.4	767.2	767.0	766.8
32.5°	746.7	747.1	747.5	747.6	747.4	747.3	747.0	746.8
35°	714.3	715.0	715.6	715.9	715.9	715.9	715.9	715.9
37.5°	680.3	681.1	681.9	682.3	682.2	682.2	682.1	682.0
40°	657.3	658.2	659.0	659.6	660.0	660.4	660.8	661.2
42.5°	636.1	637.1	638.1	638.6	638.7	638.8	638.9	639.0
45°	602.1	603.5	604.9	605.7	606.0	606.2	606.4	606.6
47.5°	566.9	569.0	571.1	572.4	572.8	573.3	573.7	574.2
50°	543.5	545.8	548.0	549.5	550.1	550.7	551.3	552.0
52.5°	520.1	522.5	525.0	526.5	526.9	527.4	527.8	528.2
55°	483.3	485.6	487.9	489.4	490.2	491.1	491.9	492.7
57.5°	446.9	449.5	452.1	453.7	454.3	455.0	455.6	456.2
60°	422.0	425.1	428.2	430.0	430.6	431.2	431.9	432.5
62.5°	396.7	400.1	403.6	405.6	406.4	407.2	408.0	408.8
65°	359.0	362.1	365.2	367.1	368.0	368.8	369.6	370.4
67.5°	320.3	324.0	327.8	330.2	331.3	332.3	333.4	334.5
70°	294.0	297.9	301.8	304.3	305.6	306.8	308.1	309.3
72.5°	269.5	273.7	277.9	280.5	281.4	282.3	283.2	284.1
75°	232.4	236.5	240.6	243.2	244.2	245.2	246.2	247.3
77.5°	195.2	199.7	204.3	207.0	207.8	208.6	209.4	210.3
80°	173.0	177.5	182.0	184.7	185.6	186.4	187.2	188.0
82.5°	151.9	156.2	160.6	163.5	165.1	166.5	168.0	169.5
85°	123.0	127.5	132.1	135.1	136.8	138.4	140.1	141.7
87.5°	100.7	105.4	110.2	113.4	114.9	116.4	117.8	119.3
90°	91.1	96.2	101.3	104.7	106.3	108.0	109.7	111.3
92.5°	95.1	100.1	105.2	108.5	110.1	111.7	113.3	114.9
95°	101.9	106.9	111.9	115.2	116.8	118.4	120.0	121.5
97.5°	111.2	115.9	120.7	123.9	125.4	126.9	128.3	129.8
100°	117.4	122.3	127.3	130.5	131.8	133.2	134.6	136.0
102.5°	124.3	129.1	134.0	137.1	138.6	140.0	141.4	142.9
105°	135.4	139.9	144.4	147.5	149.2	150.8	152.5	154.1
107.5°	148.6	152.9	157.2	160.0	161.2	162.5	163.7	165.0
110°	157.7	161.8	165.9	168.6	170.0	171.4	172.7	174.2



TEST NUMBER: P333209-940

CATALOG NUMBER: S125DIP-S850D365U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	166.7	170.6	174.4	177.0	178.3	179.7	180.9	182.3
115°	181.1	184.8	188.4	190.8	192.0	193.1	194.3	195.5
117.5°	195.2	198.8	202.2	204.6	205.7	206.9	207.9	209.1
120°	204.9	208.5	212.0	214.2	215.2	216.1	217.0	218.0
122.5°	214.2	217.4	220.7	222.8	223.8	224.9	225.9	226.9
125°	228.0	231.2	234.3	236.4	237.4	238.4	239.2	240.2
127.5°	241.6	244.6	247.5	249.6	250.6	251.6	252.7	253.8
130°	251.1	254.0	256.7	258.6	259.5	260.4	261.3	262.2
132.5°	259.8	262.6	265.4	267.2	267.8	268.5	269.1	269.8
135°	272.8	275.4	278.1	279.8	280.6	281.3	282.0	282.9
137.5°	286.3	288.8	291.3	292.8	293.3	293.8	294.3	294.7
140°	294.7	297.1	299.5	301.0	301.4	301.9	302.4	302.8
142.5°	303.3	305.3	307.4	308.6	309.1	309.5	310.0	310.5
145°	316.6	317.6	318.7	319.5	320.1	320.7	321.3	321.9
147.5°	329.5	330.0	330.6	330.7	330.6	330.5	330.4	330.3
150°	337.9	337.9	337.9	337.9	338.0	338.0	338.0	338.1
152.5°	346.3	346.4	346.6	346.6	346.3	346.2	346.0	345.7
155°	358.3	358.6	358.8	358.8	358.5	358.1	357.8	357.4
157.5°	368.6	369.0	369.3	369.2	368.7	368.2	367.7	367.3
160°	375.0	375.2	375.5	375.5	375.1	374.8	374.4	374.1
162.5°	380.8	381.2	381.6	381.6	381.1	380.7	380.3	379.9
165°	388.9	389.1	389.4	389.3	388.9	388.5	388.1	387.6
167.5°	394.8	395.1	395.6	395.6	395.1	394.7	394.2	393.9
170°	398.2	398.7	399.1	399.0	398.6	398.1	397.6	397.1
172.5°	400.8	401.2	401.6	401.6	401.2	400.7	400.3	399.8
175°	403.6	404.0	404.5	404.4	403.9	403.4	403.0	402.4
177.5°	404.9	405.3	405.6	405.6	405.2	404.7	404.4	403.9
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0

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