

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: P333245-930

Luminaire Tested: **S125DIP-S850D1205U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333245-930
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-S850D1205U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6074.9 lumens
Efficiency: N/A
Efficacy: 106.8 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

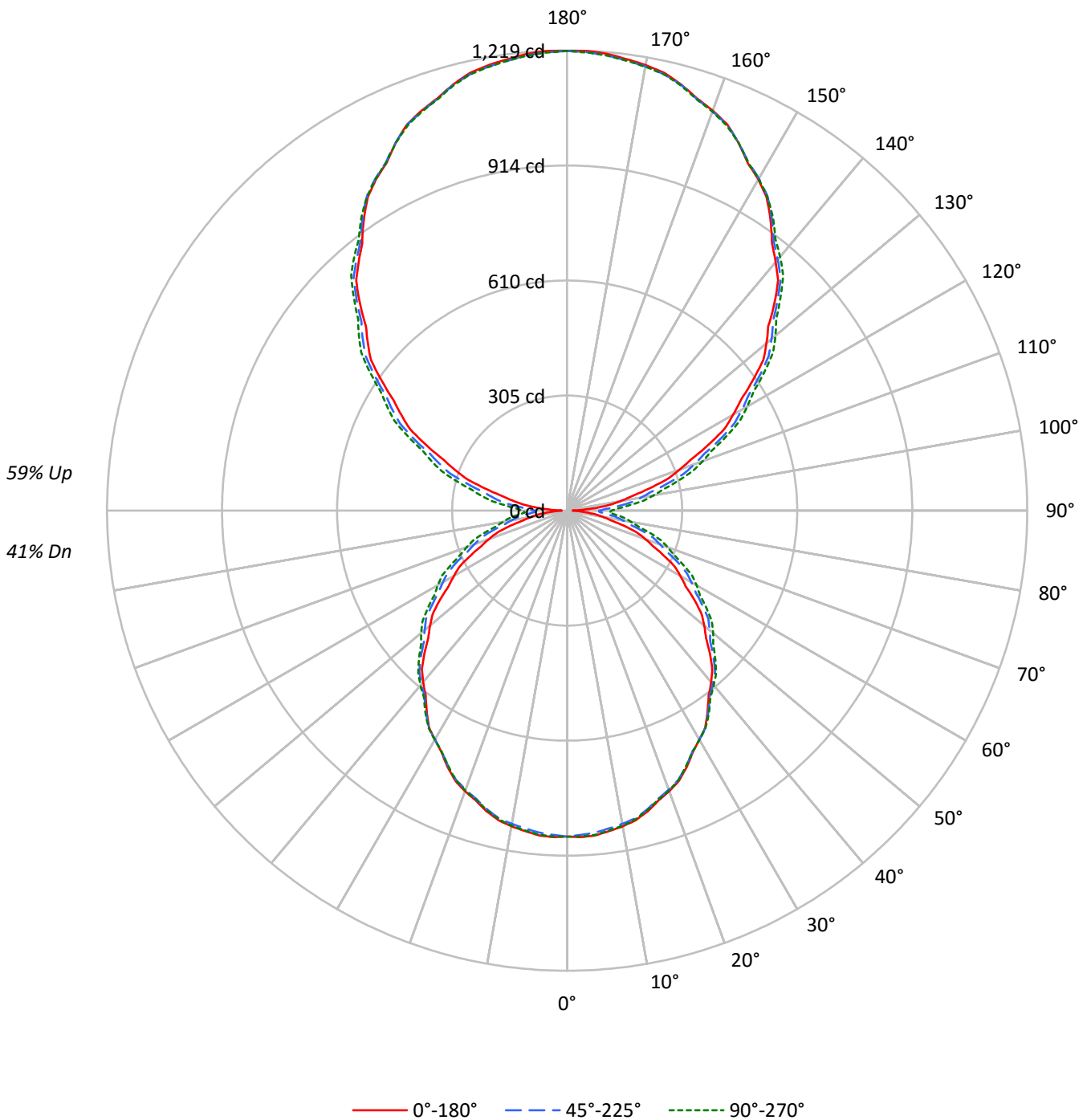
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	40	39	34
2	86	79	73	67	78	72	67	62	59	55	52	47	44	42	36	34	33	28
3	79	69	62	56	71	63	57	51	52	47	43	42	38	35	32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	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	40	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	11
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5577	5577	5577
5°	5589	5475	5492
10°	5549	5377	5369
15°	5484	5260	5212
20°	5394	5115	5055
25°	5288	4960	4863
30°	5160	4791	4687
35°	5040	4634	4526
40°	4918	4469	4364
45°	4780	4328	4221
50°	4649	4175	4095
55°	4491	4030	3946
60°	4317	3865	3793
65°	4137	3693	3622
70°	3931	3457	3446
75°	3607	3230	3231
80°	3183	2957	2996
85°	2789	2770	2923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.3
10°-20°	231.8	3.8
20°-30°	344.8	5.7
30°-40°	408.4	6.7
40°-50°	422.2	7.0
50°-60°	389.0	6.4
60°-70°	314.4	5.2
70°-80°	210.6	3.5
80°-90°	111.9	1.8
90°-100°	142.8	2.4
100°-110°	286.0	4.7
110°-120°	438.1	7.2
120°-130°	553.9	9.1
130°-140°	608.9	10.0
140°-150°	591.0	9.7
150°-160°	495.1	8.1
160°-170°	329.1	5.4
170°-180°	115.2	1.9
0°-30°	658.3	10.8
0°-40°	1066.7	17.6
0°-60°	1877.9	30.9
0°-90°	2514.8	41.4
90°-120°	866.9	14.3
90°-150°	2620.8	43.1
90°-180°	3560.0	58.6
0°-180°	6074.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	862	82
15°	825	825	820	824	821	232
25°	749	751	747	750	746	345
35°	649	654	652	654	654	406
45°	534	543	548	553	555	412
55°	411	424	438	447	450	367
65°	283	302	323	335	339	280
75°	156	178	205	221	226	165
85°	47	75	104	122	130	50
90°	14	49	85	108	118	12
95°	73	97	135	159	168	74
105°	224	243	273	295	304	239
115°	413	424	447	461	466	409
125°	599	605	622	633	637	536
135°	777	782	788	799	800	598
145°	940	943	946	950	950	587
155°	1074	1074	1075	1079	1074	495
165°	1168	1166	1167	1170	1165	329
175°	1215	1211	1211	1216	1210	115
180°	1217	1217	1217	1217	1217	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	865.7	865.4	865.1	864.8	864.5	863.8	862.7	861.7	860.6	859.6	860.6
5°	863.6	863.3	862.9	862.5	862.2	861.3	860.0	858.7	857.4	856.1	857.5
7.5°	856.1	855.9	855.7	855.6	855.4	854.7	853.4	852.0	850.6	849.3	850.6
10°	849.3	849.3	849.3	849.3	849.3	848.6	847.0	845.5	844.0	842.5	843.8
12.5°	839.8	839.9	840.1	840.2	840.4	839.8	838.7	837.5	836.3	835.0	836.1
15°	824.8	824.9	825.1	825.2	825.5	824.9	823.6	822.3	820.9	819.6	820.8
17.5°	805.1	805.4	805.8	806.2	806.6	806.1	804.8	803.5	802.2	800.9	801.7
20°	790.8	791.2	791.6	792.0	792.4	791.9	790.6	789.3	787.9	786.6	787.2
22.5°	774.6	775.3	775.9	776.7	777.3	776.9	775.4	774.0	772.5	771.0	771.8
25°	749.3	749.9	750.5	751.1	751.6	751.3	750.2	749.1	748.0	746.8	747.5
27.5°	721.2	722.1	722.9	723.7	724.6	724.3	723.1	721.8	720.5	719.3	719.7
30°	700.3	701.4	702.5	703.6	704.7	704.7	703.6	702.5	701.4	700.3	700.7
32.5°	681.3	682.2	683.2	684.2	685.2	685.3	684.4	683.6	682.8	682.0	682.3
35°	648.6	650.0	651.3	652.6	653.9	654.3	653.7	653.1	652.6	652.0	652.6
37.5°	615.9	617.1	618.3	619.5	620.8	621.3	621.0	620.9	620.7	620.5	621.3
40°	593.5	595.1	596.6	598.1	599.6	600.2	600.1	599.9	599.7	599.5	600.2
42.5°	569.2	571.1	573.1	575.0	577.0	578.2	578.6	579.0	579.4	579.8	580.7
45°	534.3	536.4	538.4	540.5	542.6	544.0	545.0	545.9	546.9	547.8	549.2
47.5°	498.6	500.5	502.4	504.3	506.2	508.0	509.6	511.3	512.8	514.5	516.4
50°	474.2	476.2	478.3	480.4	482.4	484.5	486.6	488.7	490.7	492.8	494.9
52.5°	448.4	450.9	453.5	456.0	458.5	461.1	463.6	466.1	468.6	471.2	473.4
55°	410.7	413.7	416.7	419.7	422.7	425.7	428.8	431.8	434.7	437.7	439.9
57.5°	372.0	375.7	379.3	382.9	386.5	390.0	393.5	397.0	400.4	403.9	406.3
60°	346.3	350.1	353.8	357.6	361.3	365.2	368.9	372.7	376.4	380.2	383.0
62.5°	321.2	325.0	328.8	332.6	336.3	340.2	344.3	348.4	352.4	356.4	359.6
65°	282.8	287.1	291.5	295.8	300.1	304.5	309.1	313.6	318.1	322.6	325.5
67.5°	246.5	250.8	254.9	259.1	263.3	267.7	272.2	276.9	281.4	286.0	289.4
70°	220.1	224.5	228.8	233.2	237.5	242.1	247.0	251.8	256.7	261.6	265.2
72.5°	194.4	198.9	203.3	207.8	212.3	217.2	222.6	228.0	233.3	238.6	242.5
75°	155.8	160.7	165.6	170.5	175.4	180.8	186.9	192.9	198.9	204.9	208.6
77.5°	118.7	124.3	130.0	135.7	141.3	147.0	152.8	158.6	164.4	170.2	174.3
80°	95.7	101.3	107.0	112.6	118.3	124.3	130.7	137.1	143.5	149.9	154.0
82.5°	74.7	80.6	86.6	92.5	98.5	104.7	111.3	117.8	124.3	130.9	134.9
85°	46.6	52.7	59.0	65.2	71.4	77.8	84.4	91.0	97.6	104.1	108.3
87.5°	26.6	32.9	39.3	45.7	52.0	58.5	65.2	71.9	78.7	85.4	89.8
90°	14.5	22.2	29.9	37.6	45.3	53.1	61.0	68.8	76.7	84.6	90.0
92.5°	35.1	41.9	48.6	55.4	62.1	69.7	78.0	86.4	94.7	103.1	108.7
95°	72.6	77.9	83.2	88.5	93.8	100.8	109.3	117.7	126.3	134.8	140.4
97.5°	112.3	116.9	121.5	126.0	130.6	137.5	146.5	155.6	164.7	173.7	179.0
100°	141.9	145.9	149.9	153.8	157.8	164.1	172.8	181.6	190.4	199.2	205.0
102.5°	173.9	178.4	182.9	187.4	191.8	197.7	205.0	212.2	219.5	226.7	232.6
105°	223.6	227.7	231.8	235.8	239.9	245.4	252.3	259.2	266.1	273.0	278.0
107.5°	278.7	282.3	285.9	289.5	293.2	298.2	304.5	311.0	317.3	323.7	328.1
110°	316.7	320.0	323.3	326.6	330.0	334.5	340.4	346.3	352.2	358.2	362.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	356.1	358.4	360.8	363.1	365.5	369.7	375.5	381.5	387.4	393.3	397.1
115°	413.4	415.6	417.8	419.9	422.1	425.8	431.1	436.4	441.7	447.0	450.2
117.5°	470.9	472.1	473.4	474.7	475.9	479.1	484.0	489.0	494.1	499.0	502.5
120°	507.3	508.9	510.5	512.2	513.8	516.8	521.4	525.9	530.4	535.0	538.2
122.5°	546.1	546.7	547.3	548.0	548.6	551.3	556.0	560.8	565.5	570.2	573.1
125°	599.3	600.4	601.4	602.5	603.6	606.2	610.1	614.1	618.1	622.0	624.6
127.5°	655.3	655.8	656.4	656.9	657.5	659.3	662.7	666.0	669.4	672.7	675.3
130°	689.4	690.3	691.1	692.0	692.8	694.8	697.9	700.9	704.0	707.0	709.5
132.5°	722.8	724.6	726.2	727.9	729.6	731.4	733.4	735.3	737.3	739.2	741.6
135°	776.7	777.8	778.9	779.9	781.0	782.3	783.8	785.4	786.8	788.4	790.8
137.5°	827.3	828.3	829.4	830.5	831.6	832.7	833.7	834.9	836.0	837.1	839.5
140°	859.2	860.2	861.3	862.3	863.4	864.4	865.2	866.0	866.8	867.6	870.1
142.5°	891.8	892.5	893.2	894.0	894.7	895.5	896.3	897.2	898.1	898.9	900.9
145°	939.7	940.4	941.0	941.7	942.3	943.0	943.6	944.3	944.9	945.5	946.5
147.5°	983.3	983.7	984.1	984.6	985.0	985.5	986.1	986.6	987.1	987.6	988.4
150°	1012.8	1012.6	1012.4	1012.2	1011.9	1012.3	1013.1	1013.9	1014.8	1015.6	1015.6
152.5°	1037.1	1037.3	1037.6	1038.0	1038.2	1038.5	1038.9	1039.2	1039.6	1039.9	1040.4
155°	1074.4	1074.4	1074.4	1074.4	1074.4	1074.5	1074.7	1074.9	1075.1	1075.3	1076.2
157.5°	1107.7	1107.3	1106.8	1106.4	1105.9	1105.7	1106.0	1106.2	1106.4	1106.6	1107.4
160°	1127.4	1126.8	1126.2	1125.5	1124.9	1124.7	1124.9	1125.1	1125.4	1125.5	1126.3
162.5°	1144.8	1144.4	1143.9	1143.5	1143.0	1142.8	1142.8	1142.9	1142.9	1143.0	1143.9
165°	1168.2	1167.8	1167.3	1166.9	1166.4	1166.4	1166.6	1166.8	1167.0	1167.2	1168.1
167.5°	1187.9	1187.0	1186.2	1185.4	1184.5	1184.1	1184.1	1184.1	1184.1	1184.1	1185.4
170°	1198.5	1197.7	1196.8	1196.0	1195.1	1194.7	1194.7	1194.7	1194.7	1194.7	1196.0
172.5°	1206.1	1205.3	1204.4	1203.5	1202.7	1202.2	1202.2	1202.2	1202.2	1202.2	1203.5
175°	1214.6	1213.7	1212.9	1212.0	1211.2	1210.8	1210.8	1210.8	1210.8	1210.8	1212.0
177.5°	1219.0	1218.3	1217.6	1216.9	1216.3	1215.9	1215.7	1215.5	1215.3	1215.1	1216.2
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	861.7	862.7	863.8	864.3	864.1	864.0	863.8	863.6
5°	859.1	860.5	862.1	862.7	862.5	862.3	862.2	862.0
7.5°	851.9	853.2	854.5	855.1	854.9	854.8	854.5	854.4
10°	845.1	846.4	847.7	848.3	848.2	848.0	847.7	847.6
12.5°	837.1	838.1	839.1	839.4	838.9	838.4	837.9	837.4
15°	821.9	823.0	824.2	824.3	823.6	822.8	822.1	821.3
17.5°	802.6	803.5	804.3	804.5	804.0	803.6	803.2	802.7
20°	787.7	788.3	788.9	789.1	789.1	789.1	789.1	789.1
22.5°	772.5	773.1	773.9	774.0	773.6	773.1	772.7	772.3
25°	748.4	749.1	749.8	749.7	748.8	747.9	746.9	746.0
27.5°	720.2	720.8	721.3	721.5	721.1	720.7	720.4	720.1
30°	701.0	701.4	701.7	701.9	701.6	701.5	701.3	701.1
32.5°	682.7	683.1	683.5	683.5	683.4	683.2	683.0	682.8
35°	653.1	653.7	654.3	654.5	654.5	654.5	654.5	654.5
37.5°	622.0	622.7	623.5	623.9	623.8	623.7	623.6	623.5
40°	601.0	601.8	602.5	603.1	603.4	603.8	604.2	604.5
42.5°	581.6	582.5	583.4	583.9	584.0	584.1	584.2	584.2
45°	550.5	551.8	553.1	553.8	554.1	554.2	554.4	554.6
47.5°	518.3	520.2	522.1	523.3	523.7	524.2	524.6	525.0
50°	496.9	499.0	501.1	502.4	503.0	503.5	504.1	504.7
52.5°	475.6	477.8	480.0	481.4	481.8	482.2	482.6	483.0
55°	441.9	444.0	446.1	447.4	448.2	449.0	449.7	450.5
57.5°	408.6	411.0	413.4	414.8	415.4	416.0	416.5	417.1
60°	385.8	388.7	391.5	393.1	393.7	394.3	394.8	395.4
62.5°	362.7	365.8	369.0	370.9	371.6	372.3	373.0	373.7
65°	328.2	331.1	333.9	335.7	336.5	337.2	337.9	338.7
67.5°	292.9	296.3	299.7	301.9	302.9	303.9	304.8	305.8
70°	268.8	272.4	276.0	278.3	279.4	280.5	281.7	282.8
72.5°	246.4	250.2	254.1	256.5	257.3	258.1	258.9	259.8
75°	212.5	216.2	220.0	222.3	223.2	224.2	225.1	226.1
77.5°	178.5	182.6	186.8	189.2	190.0	190.7	191.4	192.2
80°	158.2	162.3	166.4	168.8	169.7	170.4	171.1	171.9
82.5°	138.8	142.8	146.8	149.5	150.9	152.2	153.6	155.0
85°	112.4	116.6	120.7	123.5	125.1	126.5	128.1	129.6
87.5°	94.4	99.0	103.5	106.5	107.9	109.3	110.8	112.3
90°	95.4	100.8	106.2	109.7	111.7	113.7	115.6	117.6
92.5°	114.2	119.8	125.4	129.1	130.9	132.6	134.4	136.2
95°	146.0	151.6	157.2	160.9	162.7	164.4	166.1	167.9
97.5°	184.4	189.7	195.1	198.5	200.1	201.6	203.1	204.6
100°	210.8	216.7	222.5	226.2	227.8	229.3	230.9	232.4
102.5°	238.5	244.3	250.2	254.0	255.8	257.5	259.2	260.9
105°	283.1	288.0	293.1	296.6	298.6	300.5	302.5	304.4
107.5°	332.4	336.8	341.1	343.9	345.0	346.1	347.2	348.4
110°	366.6	370.7	375.0	377.6	378.7	379.8	380.9	382.0



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CATALOG NUMBER: S125DIP-S850D1205U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	400.7	404.5	408.2	410.5	411.5	412.4	413.4	414.3
115°	453.4	456.6	459.7	461.8	462.7	463.7	464.6	465.5
117.5°	505.8	509.2	512.5	514.5	514.9	515.4	515.8	516.2
120°	541.4	544.6	547.8	549.5	549.8	550.2	550.4	550.7
122.5°	575.9	578.9	581.7	583.3	583.8	584.3	584.7	585.2
125°	627.2	629.8	632.4	634.1	634.8	635.5	636.3	637.0
127.5°	677.8	680.4	683.0	684.6	685.3	686.0	686.6	687.3
130°	711.9	714.4	716.7	718.2	718.8	719.3	719.7	720.3
132.5°	744.0	746.5	748.9	750.2	750.4	750.6	750.8	751.1
135°	793.3	795.7	798.2	799.5	799.6	799.6	799.7	799.8
137.5°	842.0	844.5	846.9	848.1	847.7	847.4	847.2	846.9
140°	872.6	875.1	877.6	878.7	878.4	878.1	877.8	877.5
142.5°	902.9	904.9	906.9	907.8	907.5	907.2	906.9	906.6
145°	947.4	948.4	949.3	949.8	949.9	950.1	950.1	950.3
147.5°	989.2	990.0	990.8	990.7	989.6	988.5	987.4	986.3
150°	1015.6	1015.6	1015.6	1015.5	1015.3	1015.0	1014.8	1014.6
152.5°	1040.9	1041.4	1041.9	1041.8	1041.1	1040.3	1039.7	1038.9
155°	1077.0	1077.8	1078.7	1078.6	1077.5	1076.4	1075.5	1074.4
157.5°	1108.2	1109.1	1109.9	1109.7	1108.3	1106.9	1105.5	1104.2
160°	1127.2	1128.0	1128.9	1128.8	1127.7	1126.7	1125.6	1124.6
162.5°	1145.0	1146.0	1147.0	1146.9	1145.7	1144.4	1143.2	1142.0
165°	1168.9	1169.7	1170.6	1170.4	1169.1	1167.8	1166.6	1165.3
167.5°	1186.6	1187.9	1189.1	1189.1	1187.8	1186.5	1185.2	1183.9
170°	1197.2	1198.5	1199.7	1199.6	1198.2	1196.7	1195.2	1193.8
172.5°	1204.8	1206.1	1207.3	1207.3	1206.0	1204.7	1203.4	1202.1
175°	1213.3	1214.6	1215.9	1215.8	1214.3	1212.8	1211.3	1209.8
177.5°	1217.2	1218.2	1219.2	1219.1	1218.0	1216.8	1215.6	1214.4
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4

(END OF REPORT)