

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: P333249-927

Luminaire Tested: **S125DIP-S850D1205U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333249-927
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-S850D1205U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6132.4 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

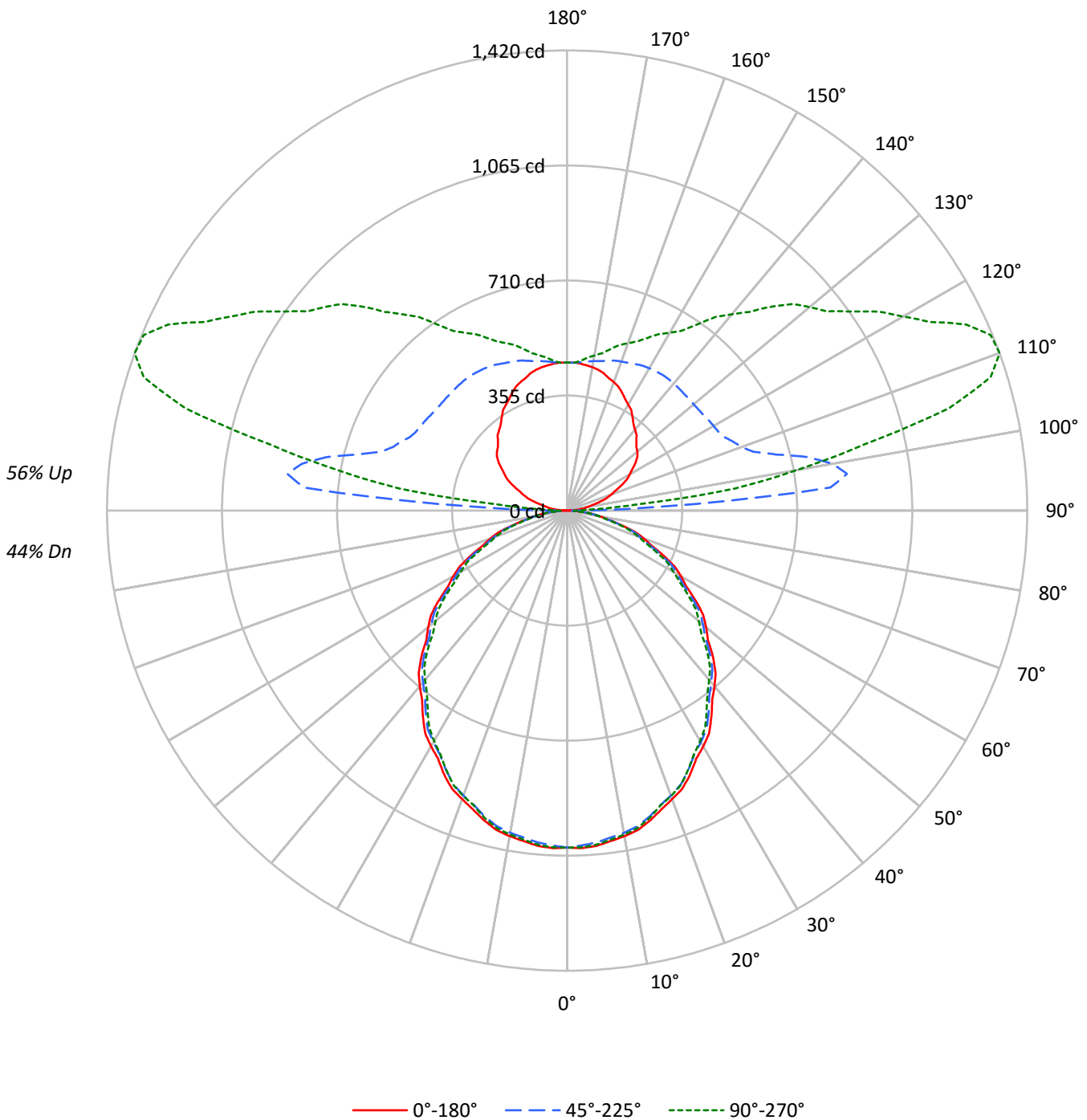
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31
3	80	71	63	58	73	65	59	53	54	49	46	44	41	38	35	33	31	26
4	73	62	55	49	67	57	51	45	48	43	39	39	35	32	31	28	26	22
5	67	56	48	42	61	51	44	39	43	38	33	35	31	28	28	25	23	20
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	25	22	20	17
7	57	45	37	31	52	41	34	29	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6716	6716	6716
5°	6731	6667	6710
10°	6690	6620	6658
15°	6618	6540	6568
20°	6514	6429	6441
25°	6402	6297	6291
30°	6264	6154	6123
35°	6117	6000	5916
40°	5966	5833	5751
45°	5802	5681	5569
50°	5621	5497	5332
55°	5447	5290	5141
60°	5239	5079	4899
65°	4991	4828	4664
70°	4755	4538	4381
75°	4332	4190	4045
80°	3857	3794	3704
85°	3349	3416	3231



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	1.6
10°-20°	277.0	4.5
20°-30°	409.0	6.7
30°-40°	477.2	7.8
40°-50°	479.3	7.8
50°-60°	420.7	6.9
60°-70°	313.5	5.1
70°-80°	179.3	2.9
80°-90°	54.7	0.9
90°-100°	330.9	5.4
100°-110°	711.4	11.6
110°-120°	667.6	10.9
120°-130°	541.1	8.8
130°-140°	434.2	7.1
140°-150°	327.7	5.3
150°-160°	230.6	3.8
160°-170°	136.0	2.2
170°-180°	44.2	0.7
0°-30°	784.0	12.8
0°-40°	1261.2	20.6
0°-60°	2161.2	35.2
0°-90°	2708.7	44.2
90°-120°	1710.0	27.9
90°-150°	3013.0	49.1
90°-180°	3424.0	55.8
0°-180°	6132.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1038	1036	1028	1035	1035	98
15°	990	987	978	982	982	279
25°	898	894	884	885	883	413
35°	776	772	761	757	750	485
45°	635	631	622	612	610	489
55°	484	481	470	462	457	432
65°	327	325	316	309	305	324
75°	174	172	168	165	162	185
85°	45	46	46	45	44	51
90°	1	8	15	19	21	4
95°	30	90	816	370	216	32
105°	104	145	667	1314	1220	110
115°	186	224	536	1155	1359	183
125°	258	302	514	919	1071	229
135°	302	363	510	770	889	234
145°	352	403	512	637	701	220
155°	401	432	499	564	588	185
165°	438	450	479	508	516	123
175°	456	456	459	465	463	43
180°	456	456	456	456	456	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1042.6	1042.1	1041.7	1041.2	1040.8	1039.8	1038.4	1037.0	1035.5	1034.0	1035.5
5°	1038.3	1037.9	1037.5	1037.2	1036.8	1035.7	1033.9	1032.1	1030.2	1028.4	1030.1
7.5°	1028.7	1028.4	1028.0	1027.6	1027.3	1026.1	1024.1	1022.1	1020.1	1018.0	1019.6
10°	1020.2	1019.9	1019.5	1019.1	1018.7	1017.6	1015.5	1013.5	1011.5	1009.5	1011.0
12.5°	1009.6	1009.0	1008.4	1007.7	1007.0	1005.8	1003.9	1002.0	1000.1	998.3	999.5
15°	989.8	989.2	988.6	988.1	987.5	986.3	984.3	982.2	980.2	978.2	979.1
17.5°	966.9	966.1	965.3	964.5	963.7	962.2	960.1	958.1	955.9	953.9	955.0
20°	947.8	947.5	947.1	946.7	946.3	944.9	942.5	940.2	937.8	935.4	936.8
22.5°	928.7	928.0	927.4	926.7	926.1	924.6	922.4	920.1	917.9	915.7	916.6
25°	898.4	897.5	896.6	895.6	894.8	893.1	890.7	888.4	886.0	883.6	884.0
27.5°	863.0	862.5	862.0	861.4	860.9	859.4	856.9	854.4	852.0	849.5	849.6
30°	840.0	839.5	838.9	838.4	837.8	836.1	833.5	830.7	827.9	825.2	824.8
32.5°	815.0	814.1	813.3	812.5	811.7	810.0	807.6	805.1	802.6	800.2	799.5
35°	775.9	775.1	774.4	773.6	772.9	771.3	768.7	766.1	763.6	761.0	760.1
37.5°	735.2	734.3	733.3	732.5	731.5	729.8	727.5	725.0	722.6	720.3	718.8
40°	707.6	706.6	705.8	704.8	703.9	702.2	699.6	697.0	694.5	691.9	690.3
42.5°	677.9	677.2	676.4	675.7	674.9	673.2	670.7	668.0	665.5	663.0	661.5
45°	635.2	634.4	633.7	633.0	632.2	630.7	628.6	626.4	624.2	622.0	619.8
47.5°	589.1	589.1	589.1	589.1	589.2	588.0	585.3	582.7	580.0	577.4	575.1
50°	559.4	558.9	558.3	557.8	557.3	555.9	553.7	551.5	549.3	547.1	544.7
52.5°	529.2	528.8	528.4	528.0	527.6	526.2	523.9	521.5	519.2	516.8	514.8
55°	483.8	483.2	482.7	482.1	481.6	480.0	477.4	474.9	472.3	469.8	468.1
57.5°	435.9	435.6	435.3	435.0	434.7	433.5	431.3	429.2	427.0	424.8	422.7
60°	405.6	404.9	404.2	403.4	402.7	401.3	399.3	397.3	395.3	393.2	391.4
62.5°	374.0	373.4	372.9	372.2	371.7	370.5	368.8	367.1	365.4	363.6	361.7
65°	326.6	326.2	325.9	325.5	325.2	324.0	321.9	320.0	317.9	315.9	314.3
67.5°	280.7	280.0	279.2	278.4	277.7	276.5	275.0	273.5	272.0	270.5	269.1
70°	251.8	250.8	249.9	249.0	248.1	246.8	245.2	243.5	241.9	240.3	239.2
72.5°	220.1	219.5	218.9	218.3	217.7	216.8	215.8	214.7	213.7	212.6	211.4
75°	173.6	173.3	172.9	172.5	172.1	171.5	170.6	169.7	168.7	167.9	167.3
77.5°	130.6	130.5	130.4	130.2	130.1	129.8	129.2	128.7	128.2	127.7	127.4
80°	103.7	103.7	103.7	103.7	103.7	103.5	103.1	102.7	102.3	102.0	101.9
82.5°	79.9	79.7	79.4	79.1	78.8	78.6	78.5	78.5	78.4	78.3	78.0
85°	45.2	45.5	45.6	45.8	45.9	46.1	46.1	46.1	46.1	46.1	45.9
87.5°	18.0	18.1	18.5	18.9	19.3	19.6	19.6	19.8	19.8	20.0	20.3
90°	1.0	1.8	3.6	5.5	7.4	9.2	10.1	12.0	12.9	14.7	15.7
92.5°	11.2	13.6	21.4	32.8	48.6	75.5	125.7	210.1	301.6	296.8	240.3
95°	30.3	31.3	38.7	48.8	69.0	110.4	209.0	411.5	665.5	815.6	798.0
97.5°	50.5	51.6	56.7	66.9	85.1	114.9	180.1	328.4	594.3	870.9	1009.8
100°	64.4	66.3	69.9	80.1	97.6	125.2	178.6	298.3	530.2	831.2	1061.3
102.5°	79.9	81.0	84.0	94.8	110.8	137.7	185.2	285.7	481.6	761.2	1030.4
105°	104.0	104.0	108.6	117.8	132.5	158.4	198.8	280.7	434.4	667.3	931.5
107.5°	127.5	129.4	133.8	141.4	156.7	179.8	219.0	289.2	414.5	602.7	830.7
110°	144.5	146.4	150.0	158.4	172.1	196.1	233.8	297.3	408.7	572.5	773.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	161.4	163.3	166.2	174.5	188.3	211.5	247.8	307.6	408.7	554.8	730.5
115°	185.9	187.7	190.5	198.8	212.6	235.7	269.7	323.1	411.5	535.8	683.9
117.5°	208.0	210.8	213.7	222.0	237.7	259.9	292.2	340.8	417.6	526.3	656.1
120°	222.8	225.5	229.2	237.5	253.1	276.2	308.4	352.5	423.4	521.9	640.6
122.5°	238.2	240.3	243.2	251.4	268.6	291.6	323.8	365.8	428.6	518.2	627.4
125°	257.7	259.6	264.2	272.4	289.9	313.9	344.3	383.8	437.2	513.7	609.3
127.5°	273.0	275.8	281.7	292.2	310.8	334.7	363.9	400.4	446.9	511.4	592.8
130°	282.6	285.3	292.7	304.7	324.0	347.9	376.4	411.5	452.9	509.9	581.8
132.5°	289.9	293.4	302.3	315.8	335.8	359.7	388.2	421.0	459.5	509.9	572.9
135°	301.9	305.6	316.6	331.4	350.7	375.6	404.1	434.4	468.5	509.9	562.4
137.5°	317.0	319.8	330.1	344.8	363.8	389.4	415.3	444.4	476.8	511.0	553.0
140°	325.8	328.6	339.7	354.4	371.9	396.7	423.4	451.1	480.5	511.7	548.6
142.5°	336.1	338.2	348.5	363.2	380.0	403.4	428.6	454.7	482.7	512.5	544.9
145°	351.6	353.5	362.7	375.6	392.1	413.3	437.2	460.3	485.1	511.7	539.4
147.5°	367.8	368.9	376.8	388.8	403.1	421.8	442.8	463.6	486.0	509.4	533.7
150°	377.4	379.2	385.7	397.7	410.5	426.2	446.4	465.8	486.0	507.2	529.3
152.5°	387.7	388.8	394.5	405.0	417.2	431.3	450.1	467.2	485.3	504.2	524.1
155°	401.3	401.3	406.9	416.1	425.2	438.2	453.8	468.5	483.2	498.9	515.5
157.5°	413.5	413.3	417.7	425.6	433.7	443.5	456.9	469.4	480.9	493.4	507.4
160°	421.6	420.6	424.4	430.8	438.2	446.4	458.4	469.4	478.6	489.7	500.7
162.5°	428.2	427.3	430.9	436.7	442.6	449.4	459.9	468.7	476.4	485.3	494.9
165°	438.2	436.3	439.1	443.7	447.3	452.9	460.3	467.6	473.1	478.6	486.0
167.5°	444.8	443.9	445.5	448.1	450.7	454.2	460.3	465.4	467.9	472.2	477.4
170°	449.2	448.3	449.2	451.1	452.9	455.7	460.3	463.9	465.8	468.5	472.2
172.5°	452.2	450.5	451.4	453.2	454.3	455.7	459.5	462.5	462.8	464.1	467.1
175°	455.7	453.8	454.7	455.7	455.7	455.7	458.4	460.3	459.3	459.3	460.3
177.5°	457.3	455.8	455.8	456.5	455.8	455.8	457.3	458.0	456.5	456.5	457.3
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1037.0	1038.4	1039.8	1040.5	1040.4	1040.2	1040.1	1039.9
5°	1031.7	1033.3	1035.0	1035.7	1035.5	1035.4	1035.1	1035.0
7.5°	1021.3	1022.9	1024.5	1025.2	1025.0	1024.8	1024.6	1024.5
10°	1012.4	1013.9	1015.3	1016.0	1015.8	1015.6	1015.4	1015.3
12.5°	1000.6	1001.8	1003.0	1003.5	1003.5	1003.5	1003.5	1003.4
15°	980.1	981.0	981.9	982.3	982.3	982.3	982.3	982.3
17.5°	956.2	957.3	958.4	958.5	957.6	956.7	955.8	954.9
20°	938.0	939.3	940.6	940.7	939.8	938.9	938.0	937.1
22.5°	917.3	918.2	919.1	919.2	918.5	917.9	917.3	916.7
25°	884.3	884.7	885.1	884.9	884.5	883.9	883.4	882.8
27.5°	849.7	849.8	849.9	849.6	849.1	848.5	848.0	847.4
30°	824.5	824.1	823.7	823.3	822.8	822.2	821.7	821.1
32.5°	798.8	798.2	797.6	796.7	795.7	794.7	793.8	792.8
35°	759.2	758.3	757.4	756.2	754.7	753.3	751.8	750.4
37.5°	717.5	716.1	714.8	713.7	712.9	712.0	711.2	710.3
40°	688.6	687.0	685.3	684.2	683.7	683.2	682.6	682.1
42.5°	660.0	658.5	657.0	655.8	655.0	654.1	653.2	652.4
45°	617.6	615.4	613.2	611.8	611.3	610.8	610.2	609.7
47.5°	572.9	570.7	568.5	566.7	565.5	564.2	562.8	561.6
50°	542.3	540.0	537.6	535.8	534.5	533.2	532.0	530.7
52.5°	512.7	510.6	508.5	506.8	505.3	503.9	502.5	501.1
55°	466.5	464.9	463.2	461.8	460.4	459.1	457.9	456.6
57.5°	420.6	418.5	416.4	414.9	414.2	413.6	412.9	412.2
60°	389.6	387.8	386.0	384.4	383.1	381.8	380.6	379.3
62.5°	359.7	357.7	355.8	354.3	353.3	352.3	351.3	350.3
65°	312.7	311.0	309.3	308.2	307.4	306.7	305.9	305.2
67.5°	267.8	266.3	265.0	264.0	263.6	263.2	262.7	262.3
70°	238.1	236.9	235.8	235.0	234.2	233.5	232.7	232.0
72.5°	210.1	208.9	207.6	206.6	205.9	205.2	204.5	203.7
75°	166.8	166.2	165.6	165.0	164.3	163.5	162.8	162.1
77.5°	127.1	126.7	126.4	126.0	125.4	124.9	124.5	123.9
80°	101.6	101.5	101.3	101.0	100.7	100.3	99.9	99.6
82.5°	77.6	77.3	77.0	76.8	76.8	76.7	76.6	76.5
85°	45.7	45.6	45.3	45.1	44.7	44.4	44.0	43.6
87.5°	20.4	20.6	20.8	21.0	20.8	20.4	20.4	20.0
90°	16.6	17.5	18.4	20.3	20.3	20.3	21.2	21.2
92.5°	163.1	118.4	89.1	75.5	63.7	61.5	60.2	58.7
95°	661.8	521.9	408.7	331.4	266.0	238.4	231.1	216.3
97.5°	985.6	887.6	777.3	669.7	612.8	561.3	534.6	522.8
100°	1132.2	1087.1	992.3	896.5	833.1	766.8	732.7	718.0
102.5°	1181.5	1209.3	1163.9	1099.1	1031.1	984.0	947.0	936.0
105°	1152.5	1278.6	1319.1	1308.9	1279.5	1249.1	1230.7	1219.6
107.5°	1048.6	1216.9	1320.9	1369.0	1383.9	1383.7	1377.6	1370.2
110°	972.0	1146.9	1276.7	1354.9	1396.4	1413.9	1420.3	1420.3



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CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	911.6	1077.7	1208.9	1301.2	1361.8	1391.8	1407.8	1414.4
115°	835.8	978.5	1104.5	1204.9	1276.7	1320.9	1346.6	1358.6
117.5°	786.8	909.8	1018.4	1110.5	1182.3	1228.0	1253.5	1260.8
120°	760.3	870.8	972.0	1053.0	1121.2	1165.3	1190.2	1197.5
122.5°	740.5	842.8	933.0	1008.8	1069.6	1110.1	1135.0	1141.6
125°	711.5	805.4	885.5	951.8	1003.3	1041.1	1061.3	1070.6
127.5°	682.1	769.7	844.5	906.5	953.2	986.6	1005.8	1009.8
130°	663.7	744.7	816.5	876.3	922.3	952.7	971.1	976.6
132.5°	645.2	721.1	786.2	843.9	889.9	920.3	937.2	943.5
135°	621.3	684.8	743.8	796.2	836.7	867.1	883.7	889.2
137.5°	601.1	652.4	701.4	746.0	782.2	809.8	825.1	831.2
140°	590.0	633.3	675.7	714.3	748.4	772.3	786.1	790.7
142.5°	580.4	617.1	653.6	687.1	716.0	736.2	749.2	753.1
145°	567.9	596.4	625.0	649.8	671.9	687.6	697.8	701.4
147.5°	556.2	579.3	601.3	620.0	637.5	650.1	655.9	657.6
150°	549.5	569.8	587.2	603.8	617.7	628.7	632.4	633.3
152.5°	542.2	560.2	576.2	589.1	600.7	609.5	613.2	614.2
155°	531.1	545.8	558.7	568.9	578.1	584.5	587.2	588.2
157.5°	520.1	532.2	542.2	550.1	557.2	562.6	565.1	565.0
160°	512.7	521.9	531.1	537.6	544.0	548.6	550.5	549.5
162.5°	504.6	513.1	520.8	526.5	531.5	535.4	535.8	535.5
165°	493.4	499.8	505.3	509.9	513.7	515.5	515.5	515.5
167.5°	482.7	487.0	491.2	494.5	496.3	498.0	497.3	497.1
170°	476.8	479.6	482.4	484.2	486.0	487.0	487.0	486.0
172.5°	470.2	472.9	475.0	476.1	476.4	478.1	476.7	475.7
175°	463.0	463.0	464.9	464.9	464.9	465.8	463.9	463.0
177.5°	458.0	458.8	458.8	458.8	458.0	458.8	456.5	456.5
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5

(END OF REPORT)