

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: P333249-930

Luminaire Tested: **S125DIP-S850D1205U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333249-930
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-S850D1205U930-4F0-1E-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: 6311.4 lumens
Efficiency: N/A
Efficacy: 110.9 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

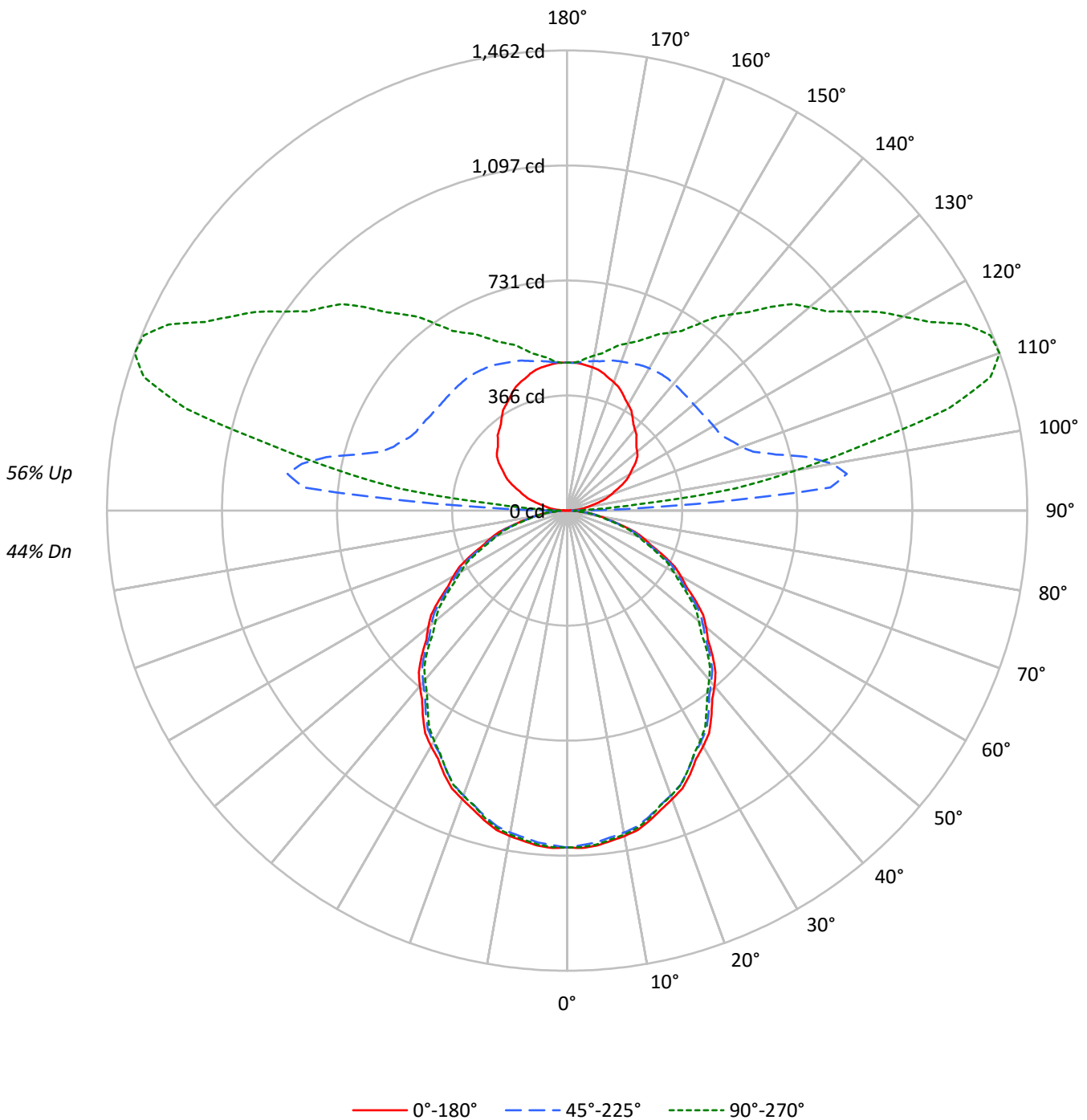
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	6912	6912	6912
5°	6928	6862	6906
10°	6885	6813	6852
15°	6811	6731	6760
20°	6704	6616	6628
25°	6589	6480	6475
30°	6447	6334	6302
35°	6296	6176	6089
40°	6139	6004	5918
45°	5971	5847	5731
50°	5785	5657	5488
55°	5606	5444	5291
60°	5391	5227	5043
65°	5136	4968	4800
70°	4893	4670	4509
75°	4457	4312	4162
80°	3968	3905	3812
85°	3453	3520	3320



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	1.6
10°-20°	285.1	4.5
20°-30°	420.9	6.7
30°-40°	491.1	7.8
40°-50°	493.3	7.8
50°-60°	433.0	6.9
60°-70°	322.6	5.1
70°-80°	184.5	2.9
80°-90°	56.3	0.9
90°-100°	340.6	5.4
100°-110°	732.2	11.6
110°-120°	687.1	10.9
120°-130°	556.9	8.8
130°-140°	446.9	7.1
140°-150°	337.2	5.3
150°-160°	237.4	3.8
160°-170°	139.9	2.2
170°-180°	45.5	0.7
0°-30°	806.9	12.8
0°-40°	1298.0	20.6
0°-60°	2224.3	35.2
0°-90°	2787.7	44.2
90°-120°	1759.9	27.9
90°-150°	3100.9	49.1
90°-180°	3524.0	55.8
0°-180°	6311.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1069	1066	1058	1066	1065	101
15°	1019	1016	1007	1011	1011	287
25°	925	920	909	911	909	425
35°	798	795	783	779	772	499
45°	654	650	640	630	628	504
55°	498	495	484	476	470	444
65°	336	334	325	318	314	333
75°	179	177	173	170	167	190
85°	47	47	48	46	45	52
90°	1	9	15	20	22	4
95°	31	92	839	381	223	33
105°	107	150	687	1352	1255	113
115°	191	231	551	1188	1398	188
125°	265	311	529	945	1102	235
135°	311	374	525	792	915	241
145°	362	414	527	656	722	227
155°	413	444	514	580	605	190
165°	451	463	493	522	530	127
175°	469	469	473	478	476	45
180°	470	470	470	470	470	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1073.0	1072.5	1072.1	1071.6	1071.1	1070.2	1068.7	1067.2	1065.7	1064.2	1065.7
5°	1068.6	1068.2	1067.8	1067.5	1067.1	1065.9	1064.0	1062.2	1060.3	1058.4	1060.1
7.5°	1058.7	1058.4	1058.0	1057.6	1057.3	1056.1	1053.9	1051.9	1049.9	1047.7	1049.4
10°	1049.9	1049.6	1049.2	1048.8	1048.5	1047.3	1045.1	1043.1	1041.1	1038.9	1040.5
12.5°	1039.1	1038.4	1037.8	1037.1	1036.4	1035.1	1033.2	1031.3	1029.3	1027.4	1028.7
15°	1018.6	1018.1	1017.5	1016.9	1016.4	1015.0	1013.0	1010.9	1008.9	1006.7	1007.7
17.5°	995.1	994.3	993.4	992.6	991.8	990.3	988.1	986.0	983.8	981.7	982.8
20°	975.4	975.1	974.7	974.3	974.0	972.5	970.0	967.6	965.2	962.7	964.1
22.5°	955.8	955.1	954.5	953.7	953.1	951.6	949.3	947.0	944.7	942.4	943.3
25°	924.6	923.7	922.8	921.8	920.9	919.2	916.7	914.3	911.8	909.4	909.8
27.5°	888.2	887.7	887.1	886.6	886.0	884.4	881.9	879.4	876.9	874.3	874.4
30°	864.5	864.0	863.4	862.8	862.3	860.5	857.8	854.9	852.1	849.3	848.9
32.5°	838.8	837.9	837.1	836.2	835.4	833.6	831.1	828.6	826.1	823.5	822.9
35°	798.5	797.7	797.0	796.2	795.5	793.8	791.2	788.5	785.9	783.3	782.3
37.5°	756.7	755.7	754.7	753.8	752.8	751.1	748.7	746.2	743.7	741.3	739.8
40°	728.2	727.2	726.4	725.4	724.4	722.7	720.0	717.4	714.8	712.1	710.5
42.5°	697.7	696.9	696.1	695.4	694.6	692.8	690.2	687.5	684.9	682.3	680.8
45°	653.7	652.9	652.2	651.4	650.7	649.1	646.9	644.7	642.4	640.2	637.9
47.5°	606.3	606.3	606.3	606.3	606.4	605.1	602.3	599.7	597.0	594.3	591.9
50°	575.8	575.2	574.6	574.1	573.6	572.1	569.9	567.6	565.3	563.0	560.6
52.5°	544.6	544.2	543.8	543.4	543.0	541.5	539.2	536.7	534.3	531.9	529.8
55°	497.9	497.3	496.8	496.2	495.6	494.0	491.4	488.8	486.1	483.5	481.8
57.5°	448.6	448.3	448.0	447.7	447.4	446.1	443.9	441.7	439.4	437.2	435.0
60°	417.4	416.7	416.0	415.2	414.4	413.0	410.9	408.9	406.8	404.7	402.8
62.5°	384.9	384.3	383.8	383.1	382.5	381.3	379.6	377.8	376.0	374.2	372.3
65°	336.1	335.7	335.4	335.0	334.7	333.5	331.3	329.3	327.2	325.1	323.4
67.5°	288.9	288.1	287.3	286.5	285.8	284.5	283.1	281.5	280.0	278.4	277.0
70°	259.1	258.1	257.2	256.2	255.4	254.0	252.3	250.6	248.9	247.3	246.1
72.5°	226.6	225.9	225.3	224.7	224.0	223.1	222.1	220.9	219.9	218.8	217.5
75°	178.6	178.3	177.9	177.6	177.2	176.5	175.5	174.6	173.7	172.8	172.2
77.5°	134.4	134.3	134.2	134.0	133.9	133.5	133.0	132.5	131.9	131.4	131.1
80°	106.7	106.7	106.7	106.7	106.7	106.5	106.2	105.7	105.3	105.0	104.8
82.5°	82.3	82.0	81.7	81.4	81.1	80.9	80.8	80.8	80.7	80.6	80.3
85°	46.6	46.8	47.0	47.1	47.3	47.5	47.5	47.5	47.5	47.5	47.2
87.5°	18.5	18.7	19.1	19.4	19.8	20.1	20.1	20.4	20.4	20.6	20.9
90°	1.0	1.9	3.8	5.7	7.6	9.5	10.4	12.3	13.3	15.2	16.1
92.5°	11.6	14.0	22.0	33.8	50.1	77.7	129.4	216.2	310.4	305.4	247.3
95°	31.2	32.2	39.8	50.2	71.0	113.7	215.1	423.5	684.9	839.4	821.3
97.5°	51.9	53.1	58.4	68.8	87.6	118.2	185.3	338.0	611.6	896.3	1039.3
100°	66.3	68.2	72.0	82.4	100.4	128.8	183.8	307.0	545.7	855.4	1092.3
102.5°	82.3	83.4	86.4	97.6	114.1	141.7	190.6	294.1	495.6	783.4	1060.5
105°	107.0	107.0	111.8	121.2	136.4	163.0	204.6	288.9	447.1	686.8	958.7
107.5°	131.3	133.2	137.7	145.5	161.3	185.1	225.4	297.7	426.6	620.3	854.9
110°	148.7	150.7	154.4	163.0	177.2	201.8	240.6	306.0	420.6	589.2	795.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	166.2	168.0	171.0	179.6	193.8	217.7	255.0	316.6	420.6	571.0	751.8
115°	191.4	193.2	196.1	204.6	218.8	242.6	277.6	332.5	423.5	551.4	703.8
117.5°	214.1	217.0	220.0	228.5	244.6	267.5	300.7	350.7	429.7	541.7	675.2
120°	229.3	232.1	235.9	244.4	260.5	284.2	317.4	362.8	435.8	537.1	659.3
122.5°	245.2	247.3	250.3	258.8	276.5	300.1	333.3	376.5	441.1	533.4	645.7
125°	265.2	267.2	271.9	280.4	298.4	323.0	354.3	395.0	450.0	528.6	627.1
127.5°	281.0	283.8	289.9	300.7	319.8	344.5	374.5	412.1	460.0	526.4	610.1
130°	290.8	293.7	301.3	313.6	333.5	358.1	387.4	423.5	466.1	524.8	598.8
132.5°	298.4	302.0	311.1	325.0	345.6	370.2	399.6	433.3	472.9	524.8	589.6
135°	310.7	314.5	325.9	341.0	360.9	386.5	415.9	447.1	482.2	524.8	578.9
137.5°	326.3	329.1	339.7	354.9	374.4	400.7	427.5	457.4	490.7	525.9	569.2
140°	335.3	338.2	349.6	364.8	382.7	408.3	435.8	464.2	494.5	526.7	564.6
142.5°	345.9	348.1	358.7	373.8	391.1	415.2	441.1	468.0	496.8	527.5	560.8
145°	361.9	363.8	373.2	386.5	403.6	425.3	450.0	473.7	499.3	526.7	555.1
147.5°	378.5	379.7	387.8	400.1	414.9	434.1	455.7	477.1	500.2	524.2	549.3
150°	388.4	390.3	397.0	409.3	422.5	438.6	459.4	479.4	500.2	522.0	544.7
152.5°	399.0	400.1	406.0	416.9	429.3	443.9	463.3	480.9	499.5	518.9	539.4
155°	413.0	413.0	418.7	428.2	437.7	450.9	467.0	482.2	497.3	513.5	530.5
157.5°	425.6	425.3	429.9	438.1	446.4	456.4	470.3	483.1	494.9	507.8	522.2
160°	433.9	432.9	436.8	443.4	450.9	459.4	471.8	483.1	492.6	504.0	515.4
162.5°	440.7	439.8	443.5	449.4	455.5	462.5	473.3	482.4	490.3	499.5	509.3
165°	450.9	449.1	451.9	456.6	460.4	466.1	473.7	481.3	486.9	492.6	500.2
167.5°	457.8	456.8	458.5	461.1	463.8	467.4	473.7	479.0	481.6	486.0	491.3
170°	462.3	461.4	462.3	464.2	466.1	469.0	473.7	477.4	479.4	482.2	486.0
172.5°	465.4	463.7	464.6	466.4	467.6	469.0	472.9	476.0	476.3	477.7	480.7
175°	469.0	467.0	468.0	469.0	469.0	469.0	471.8	473.7	472.7	472.7	473.7
177.5°	470.7	469.1	469.1	469.9	469.1	469.1	470.7	471.4	469.9	469.9	470.7
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1067.2	1068.7	1070.2	1070.9	1070.7	1070.6	1070.4	1070.2
5°	1061.8	1063.5	1065.2	1065.9	1065.8	1065.6	1065.4	1065.2
7.5°	1051.1	1052.7	1054.3	1055.1	1054.9	1054.8	1054.5	1054.3
10°	1042.0	1043.5	1045.0	1045.6	1045.5	1045.2	1045.1	1044.9
12.5°	1029.8	1031.0	1032.3	1032.8	1032.8	1032.7	1032.7	1032.7
15°	1008.7	1009.6	1010.6	1011.0	1011.0	1011.0	1011.0	1011.0
17.5°	984.1	985.2	986.3	986.5	985.5	984.6	983.7	982.8
20°	965.4	966.7	968.0	968.2	967.3	966.3	965.4	964.4
22.5°	944.1	945.0	945.9	946.0	945.3	944.7	944.0	943.5
25°	910.1	910.5	910.9	910.8	910.3	909.7	909.1	908.6
27.5°	874.5	874.6	874.7	874.4	873.8	873.3	872.7	872.1
30°	848.6	848.2	847.7	847.3	846.8	846.2	845.6	845.1
32.5°	822.1	821.5	820.8	819.9	819.0	817.9	816.9	816.0
35°	781.4	780.4	779.5	778.3	776.7	775.3	773.7	772.3
37.5°	738.4	737.0	735.6	734.5	733.7	732.8	732.0	731.1
40°	708.7	707.0	705.3	704.2	703.6	703.1	702.5	702.0
42.5°	679.2	677.7	676.1	674.9	674.1	673.2	672.3	671.5
45°	635.6	633.3	631.1	629.7	629.2	628.6	628.0	627.5
47.5°	589.6	587.3	585.1	583.3	582.0	580.7	579.3	578.0
50°	558.2	555.7	553.3	551.4	550.1	548.8	547.5	546.2
52.5°	527.7	525.5	523.3	521.5	520.1	518.6	517.1	515.7
55°	480.1	478.4	476.7	475.2	473.9	472.5	471.2	469.9
57.5°	432.9	430.7	428.5	427.1	426.3	425.7	424.9	424.2
60°	401.0	399.1	397.2	395.6	394.3	393.0	391.7	390.4
62.5°	370.2	368.2	366.2	364.6	363.6	362.6	361.6	360.5
65°	321.8	320.1	318.4	317.2	316.4	315.7	314.9	314.1
67.5°	275.6	274.1	272.7	271.7	271.3	270.8	270.4	269.9
70°	245.0	243.9	242.7	241.8	241.0	240.3	239.5	238.8
72.5°	216.2	215.0	213.7	212.6	211.9	211.2	210.4	209.6
75°	171.6	171.0	170.5	169.8	169.1	168.3	167.5	166.8
77.5°	130.8	130.4	130.0	129.6	129.1	128.6	128.1	127.5
80°	104.6	104.4	104.3	104.0	103.6	103.2	102.8	102.5
82.5°	79.9	79.6	79.2	79.1	79.0	78.9	78.8	78.8
85°	47.0	46.9	46.6	46.4	46.0	45.7	45.2	44.8
87.5°	21.0	21.2	21.4	21.6	21.4	21.0	21.0	20.6
90°	17.0	18.0	18.9	20.9	20.9	20.9	21.8	21.8
92.5°	167.9	121.8	91.7	77.7	65.6	63.3	62.0	60.4
95°	681.1	537.1	420.6	341.0	273.8	245.3	237.8	222.7
97.5°	1014.4	913.5	800.0	689.3	630.7	577.7	550.2	538.1
100°	1165.2	1118.8	1021.2	922.7	857.4	789.1	754.1	738.9
102.5°	1216.0	1244.6	1197.8	1131.1	1061.2	1012.7	974.6	963.3
105°	1186.1	1315.9	1357.6	1347.1	1316.8	1285.6	1266.6	1255.2
107.5°	1079.2	1252.4	1359.4	1408.9	1424.2	1424.1	1417.8	1410.2
110°	1000.4	1180.4	1313.9	1394.5	1437.1	1455.1	1461.8	1461.8



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CATALOG NUMBER: S125DIP-S850D1205U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	938.2	1109.1	1244.2	1339.1	1401.5	1432.4	1448.9	1455.7
115°	860.2	1007.1	1136.8	1240.1	1313.9	1359.4	1385.9	1398.2
117.5°	809.8	936.4	1048.1	1142.9	1216.8	1263.8	1290.1	1297.6
120°	782.5	896.2	1000.4	1083.8	1153.9	1199.3	1224.9	1232.5
122.5°	762.1	867.4	960.3	1038.3	1100.8	1142.5	1168.1	1174.9
125°	732.3	828.9	911.3	979.6	1032.6	1071.5	1092.3	1101.8
127.5°	702.0	792.1	869.1	932.9	981.0	1015.4	1035.1	1039.3
130°	683.1	766.4	840.3	901.9	949.3	980.5	999.5	1005.1
132.5°	664.1	742.2	809.2	868.5	915.9	947.1	964.6	971.0
135°	639.4	704.8	765.5	819.5	861.1	892.4	909.5	915.2
137.5°	618.6	671.5	721.9	767.8	805.0	833.5	849.2	855.4
140°	607.2	651.8	695.4	735.2	770.2	794.8	809.0	813.8
142.5°	597.4	635.1	672.6	707.1	736.9	757.7	771.1	775.1
145°	584.5	613.8	643.3	668.8	691.5	707.7	718.1	721.9
147.5°	572.4	596.2	618.8	638.1	656.2	669.0	675.1	676.8
150°	565.6	586.4	604.4	621.4	635.7	647.0	650.9	651.8
152.5°	558.0	576.6	593.0	606.3	618.2	627.3	631.1	632.1
155°	546.6	561.7	575.0	585.5	594.9	601.5	604.4	605.4
157.5°	535.2	547.7	558.0	566.1	573.5	579.0	581.6	581.5
160°	527.7	537.1	546.6	553.3	559.9	564.6	566.6	565.6
162.5°	519.3	528.1	536.0	541.8	547.0	551.0	551.4	551.1
165°	507.8	514.4	520.1	524.8	528.6	530.5	530.5	530.5
167.5°	496.8	501.2	505.5	508.9	510.8	512.5	511.8	511.6
170°	490.7	493.6	496.4	498.3	500.2	501.2	501.2	500.2
172.5°	483.9	486.7	488.9	490.0	490.3	492.0	490.6	489.6
175°	476.5	476.5	478.4	478.4	478.4	479.4	477.4	476.5
177.5°	471.4	472.1	472.1	472.1	471.4	472.1	469.9	469.9
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9

(END OF REPORT)