

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: P333237-930

Luminaire Tested: **S125DIP-S850D1035U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333237-930
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-S850D1035U930-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5704.6 lumens
Efficiency: N/A
Efficacy: 109.7 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

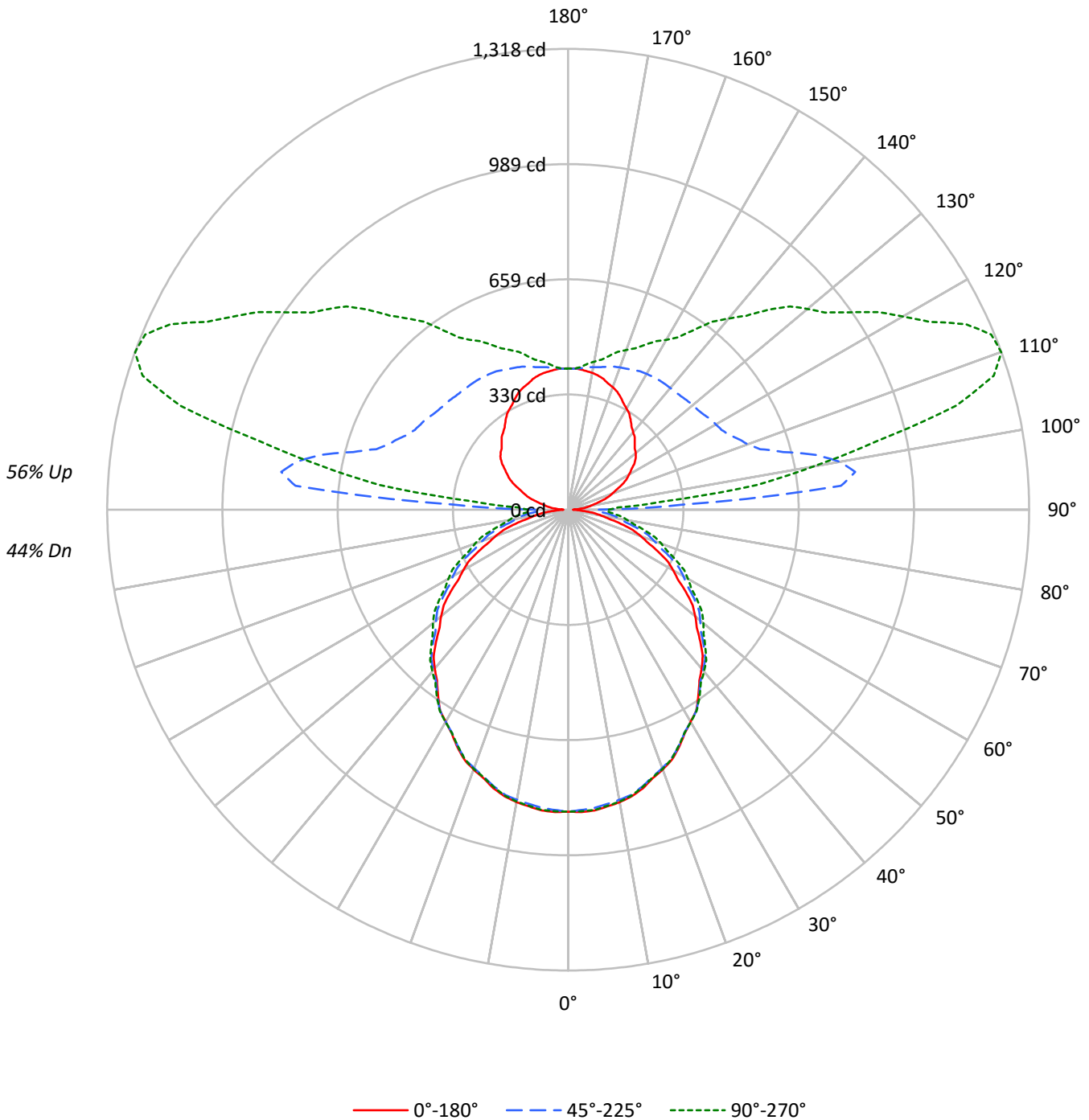
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	91	87	83	87	84	80	77	69	67	64	56	54	53	44	43	41	36
2	87	79	73	68	79	73	67	62	60	56	53	49	46	43	38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	44	47	41	37	38	34	31	30	27	25	21
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	21	18
6	61	49	41	35	55	45	38	32	38	32	28	31	26	23	24	21	19	16
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17	14
8	52	40	32	27	48	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	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	1.4
10°-20°	231.8	4.1
20°-30°	344.8	6.0
30°-40°	408.4	7.2
40°-50°	422.2	7.4
50°-60°	389.0	6.8
60°-70°	314.4	5.5
70°-80°	210.6	3.7
80°-90°	111.5	2.0
90°-100°	353.9	6.2
100°-110°	674.2	11.8
110°-120°	620.6	10.9
120°-130°	495.6	8.7
130°-140°	391.4	6.9
140°-150°	291.3	5.1
150°-160°	204.0	3.6
160°-170°	120.2	2.1
170°-180°	39.1	0.7
0°-30°	658.3	11.5
0°-40°	1066.7	18.7
0°-60°	1877.9	32.9
0°-90°	2514.4	44.1
90°-120°	1648.7	28.9
90°-150°	2827.0	49.6
90°-180°	3190.0	55.9
0°-180°	5704.6	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	48	82	105	114	11
95°	38	113	783	407	278	37
105°	100	150	637	1225	1148	105
115°	170	210	507	1069	1255	167
125°	231	270	474	845	984	205
135°	269	322	458	698	808	209
145°	312	356	452	568	628	195
155°	355	382	441	499	520	163
165°	387	398	423	449	456	109
175°	403	403	406	411	409	38
180°	404	404	404	404	404	



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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	32.8	39.1	45.5	51.8	58.4	64.9	71.6	78.2	84.9	89.4
90°	14.3	21.2	28.9	36.5	44.1	52.0	59.2	67.2	74.4	82.4	87.6
92.5°	22.1	29.8	42.2	57.9	77.5	107.3	158.2	239.4	326.8	329.1	283.3
95°	37.8	43.5	55.0	68.8	91.6	133.9	227.4	412.8	643.8	782.9	771.6
97.5°	54.6	60.0	68.9	82.3	102.8	134.4	198.3	335.7	576.8	827.7	954.4
100°	66.3	71.8	79.1	92.0	111.4	140.8	194.0	305.8	517.0	789.1	996.5
102.5°	79.2	83.9	90.2	103.4	121.2	149.8	197.6	292.4	471.4	724.6	966.4
105°	99.6	102.6	109.7	120.8	136.9	164.0	205.5	283.5	425.1	636.7	874.0
107.5°	119.4	123.6	130.0	139.3	155.4	179.9	220.0	287.4	403.7	575.4	780.6
110°	133.7	137.6	143.1	152.7	167.1	192.1	230.7	292.1	395.9	546.0	727.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	148.7	152.1	156.5	165.7	179.7	203.7	240.8	298.9	393.3	527.7	686.4
115°	169.5	172.4	176.2	184.8	198.4	221.8	256.8	308.9	391.9	506.7	641.2
117.5°	188.2	191.5	194.9	203.2	217.8	240.3	273.4	321.0	393.5	494.3	612.3
120°	201.2	204.2	208.0	215.9	230.3	253.1	285.9	329.3	396.3	487.7	595.9
122.5°	214.2	216.2	219.2	226.7	242.1	264.6	297.3	338.6	398.3	481.8	581.3
125°	231.3	232.7	236.6	243.8	259.0	281.9	312.6	351.3	402.4	473.6	561.3
127.5°	243.9	246.2	251.2	260.3	276.5	299.1	328.2	363.5	407.7	467.8	542.5
130°	252.4	254.6	261.0	271.4	288.3	310.6	338.5	372.1	411.3	464.5	530.6
132.5°	258.2	261.3	269.0	281.0	298.6	320.7	348.1	379.0	415.1	461.7	520.1
135°	268.6	271.7	281.3	294.2	311.0	333.5	360.1	388.3	419.7	457.7	506.5
137.5°	281.8	284.1	293.1	306.0	322.5	345.4	369.0	395.4	424.7	455.6	495.0
140°	288.9	291.4	301.2	314.2	329.6	351.7	375.5	400.1	426.3	454.2	488.9
142.5°	298.1	299.7	308.7	321.6	336.2	356.9	379.2	402.4	427.1	453.6	484.0
145°	311.8	313.2	321.1	332.3	346.8	365.4	386.6	406.9	428.9	452.5	477.8
147.5°	325.2	326.2	333.2	343.8	356.4	372.9	391.5	409.9	429.7	450.4	472.2
150°	333.7	335.3	341.0	351.6	363.0	376.8	394.8	411.8	429.7	448.4	468.0
152.5°	342.8	343.8	348.9	358.1	368.8	381.4	398.0	413.1	429.1	445.9	463.4
155°	354.8	354.8	359.7	367.9	376.0	387.4	401.2	414.3	427.3	441.2	455.8
157.5°	365.6	365.4	369.3	376.3	383.5	392.2	404.0	415.1	425.2	436.3	448.6
160°	372.8	371.9	375.2	380.9	387.4	394.8	405.3	415.1	423.2	433.0	442.8
162.5°	378.6	377.8	381.1	386.1	391.3	397.4	406.6	414.4	421.3	429.1	437.6
165°	387.4	385.8	388.2	392.3	395.6	400.5	406.9	413.4	418.3	423.2	429.7
167.5°	393.3	392.5	394.0	396.2	398.5	401.5	406.9	411.5	413.8	417.5	422.1
170°	397.2	396.4	397.2	398.8	400.5	402.8	406.9	410.2	411.8	414.3	417.5
172.5°	399.8	398.4	399.2	400.7	401.7	402.8	406.3	408.9	409.2	410.3	412.9
175°	402.8	401.2	402.0	402.8	402.8	402.8	405.3	406.9	406.1	406.1	406.9
177.5°	404.3	403.0	403.0	403.7	403.0	403.0	404.3	405.0	403.7	403.7	404.3
180°	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7



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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°	93.9	98.4	102.9	106.0	107.4	108.7	110.1	111.5
90°	92.7	97.9	103.1	107.5	108.8	110.1	112.3	113.6
92.5°	219.3	183.9	162.2	153.0	143.8	143.2	143.3	143.4
95°	655.3	535.7	439.8	374.1	317.6	294.6	289.3	277.6
97.5°	937.0	854.2	760.7	668.2	619.1	574.9	552.5	543.4
100°	1063.2	1027.3	947.4	865.3	810.2	752.8	723.7	711.9
102.5°	1103.8	1132.2	1095.8	1041.0	982.0	941.4	909.9	901.2
105°	1073.1	1188.4	1227.9	1221.5	1196.8	1171.3	1156.3	1147.9
107.5°	977.1	1129.7	1225.3	1270.2	1284.6	1285.6	1281.4	1276.1
110°	906.4	1064.6	1183.0	1254.6	1292.5	1309.3	1316.3	1317.7



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CATALOG NUMBER: S125DIP-S850D1035U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	850.0	1000.3	1119.7	1203.7	1258.6	1286.4	1301.9	1309.0
115°	778.8	908.3	1023.2	1114.2	1178.8	1219.0	1242.9	1254.7
117.5°	731.1	843.0	942.2	1025.9	1090.6	1132.3	1156.2	1164.0
120°	704.9	805.8	898.5	972.3	1033.6	1073.8	1097.0	1104.6
122.5°	684.4	777.9	860.7	929.8	984.7	1021.7	1044.7	1051.7
125°	654.6	740.7	814.5	875.1	921.6	955.9	974.8	983.8
127.5°	624.3	704.5	773.4	830.1	872.6	903.2	921.2	925.9
130°	605.6	679.9	746.0	800.7	842.4	870.2	887.4	893.2
132.5°	586.6	656.3	716.6	769.2	810.7	838.4	854.2	860.5
135°	561.0	619.6	674.2	722.3	759.0	786.8	802.4	808.2
137.5°	539.6	587.3	632.8	673.7	706.5	731.6	745.9	752.0
140°	527.5	567.9	607.4	642.9	673.8	695.8	708.7	713.5
142.5°	517.1	551.3	585.3	616.2	642.5	661.1	673.4	677.6
145°	504.0	530.2	556.4	579.2	599.5	614.1	623.8	627.8
147.5°	492.4	513.1	532.8	549.8	565.6	577.0	582.5	584.3
150°	485.9	503.8	519.3	534.0	546.4	556.4	559.8	560.8
152.5°	479.4	495.3	509.5	520.9	531.2	539.1	542.3	543.2
155°	469.6	482.7	494.1	503.0	511.1	516.8	519.3	520.1
157.5°	459.8	470.6	479.4	486.4	492.8	497.4	499.7	499.5
160°	453.3	461.5	469.6	475.3	481.0	485.1	486.7	485.9
162.5°	446.2	453.6	460.5	465.5	469.9	473.4	473.7	473.5
165°	436.3	442.0	446.9	450.9	454.1	455.8	455.8	455.8
167.5°	426.8	430.6	434.3	437.2	438.9	440.3	439.7	439.5
170°	421.6	424.0	426.5	428.1	429.7	430.6	430.6	429.7
172.5°	415.7	418.2	420.0	420.9	421.3	422.7	421.4	420.6
175°	409.4	409.4	411.0	411.0	411.0	411.8	410.2	409.4
177.5°	405.0	405.6	405.6	405.6	405.0	405.6	403.7	403.7
180°	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7

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