

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: P332576

Luminaire Tested: **S124DIP-S575D1205U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332576
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S575D1205U835-4F0-1E-UDD-D4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6673.7 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

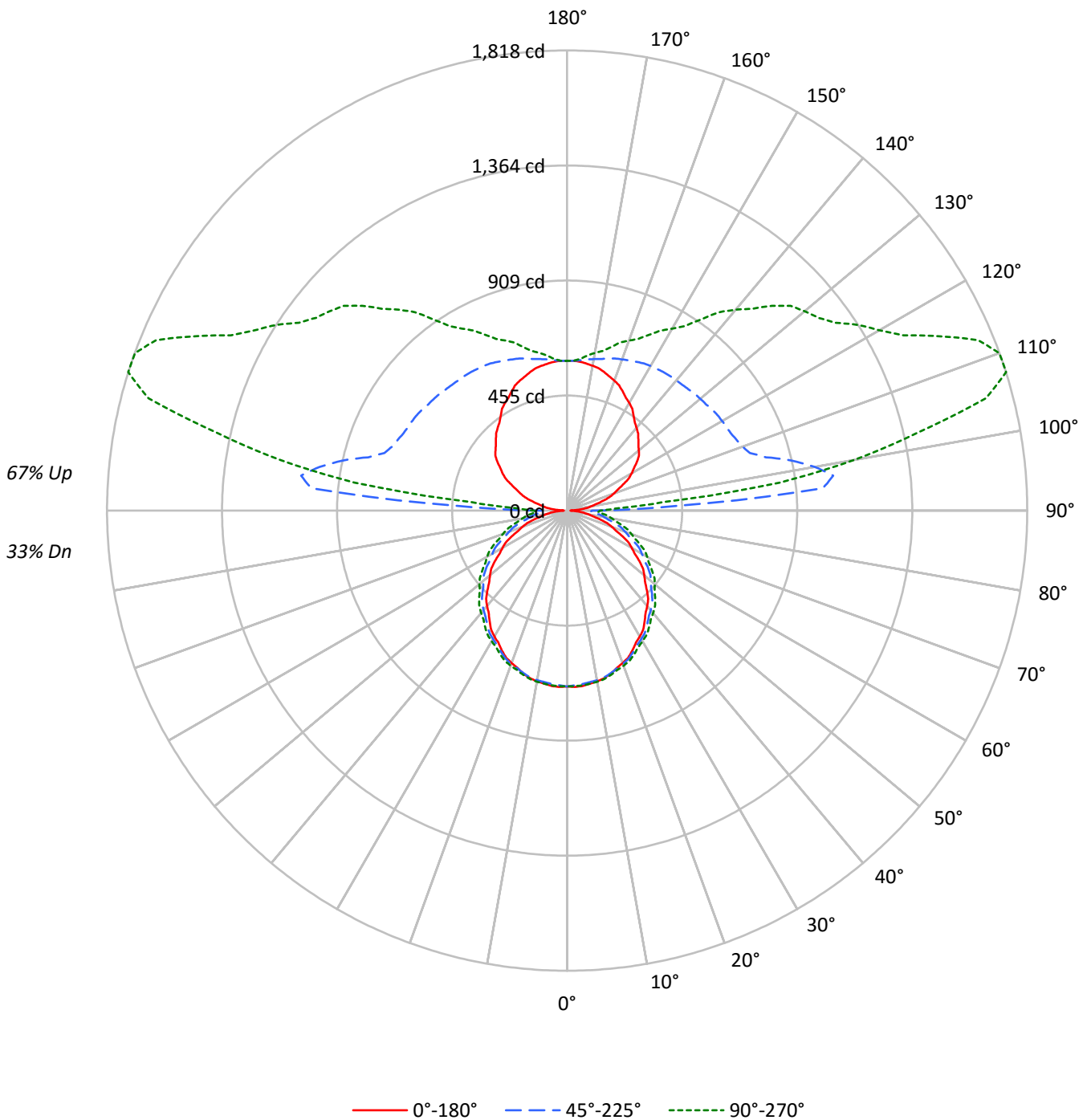
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	93	89	85	81	84	80	77	73	64	61	59	48	47	45	35	34	33	26
2	85	77	71	66	76	70	64	60	55	52	48	42	40	37	30	28	27	21
3	77	67	60	54	69	61	55	49	48	44	40	37	34	31	26	24	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19	15
5	64	53	45	39	58	48	41	35	38	33	29	29	26	23	21	19	17	13
6	59	47	39	33	53	43	36	31	34	29	25	26	23	20	19	16	15	11
7	55	42	34	29	49	38	32	27	31	26	22	24	20	17	17	15	13	10
8	50	38	31	25	45	35	28	23	28	23	19	22	18	15	16	13	11	9
9	47	35	27	22	42	32	25	21	26	21	17	20	16	14	15	12	10	8
10	44	32	25	20	39	29	23	18	23	19	15	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5610	5610	5610
5°	5628	5483	5498
10°	5593	5393	5388
15°	5543	5289	5260
20°	5467	5175	5135
25°	5382	5046	4997
30°	5290	4919	4856
35°	5185	4787	4732
40°	5102	4663	4603
45°	4978	4549	4492
50°	4873	4416	4375
55°	4765	4291	4237
60°	4596	4132	4112
65°	4410	3962	3958
70°	4186	3768	3778
75°	3872	3553	3616
80°	3526	3347	3457
85°	3082	3163	3364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	1.0
10°-20°	188.5	2.8
20°-30°	285.1	4.3
30°-40°	344.9	5.2
40°-50°	364.7	5.5
50°-60°	343.2	5.1
60°-70°	284.7	4.3
70°-80°	200.0	3.0
80°-90°	116.3	1.7
90°-100°	494.3	7.4
100°-110°	938.8	14.1
110°-120°	829.7	12.4
120°-130°	688.7	10.3
130°-140°	566.7	8.5
140°-150°	428.4	6.4
150°-160°	299.9	4.5
160°-170°	176.4	2.6
170°-180°	57.4	0.9
0°-30°	539.4	8.1
0°-40°	884.4	13.3
0°-60°	1592.2	23.9
0°-90°	2193.3	32.9
90°-120°	2262.9	33.9
90°-150°	3946.6	59.1
90°-180°	4480.0	67.1
0°-180°	6673.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	693	688	694	693	66
15°	667	668	665	672	672	188
25°	610	615	617	625	626	281
35°	534	543	551	561	564	334
45°	445	460	475	487	492	344
55°	349	365	388	403	408	311
65°	241	266	293	311	318	239
75°	134	163	195	216	224	142
85°	41	74	109	131	140	44
90°	14	53	98	122	130	10
95°	48	157	1015	557	379	51
105°	143	220	814	1711	1712	153
115°	244	313	716	1359	1629	242
125°	337	400	698	1147	1294	300
135°	398	474	678	1006	1144	308
145°	457	523	667	837	922	287
155°	519	561	648	734	766	239
165°	566	583	622	658	668	160
175°	590	592	596	604	602	56
180°	592	592	592	592	592	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	697.4	697.0	696.6	696.1	695.7	695.0	693.9	692.8	691.6	690.5	691.5
5°	695.7	695.2	694.6	694.1	693.6	692.7	691.5	690.3	689.1	687.9	689.3
7.5°	689.8	689.4	689.1	688.8	688.5	687.9	686.9	685.9	684.8	683.8	685.4
10°	684.8	684.6	684.4	684.3	684.1	683.6	682.7	681.8	681.0	680.1	681.7
12.5°	677.9	677.9	677.9	677.8	677.8	677.5	676.9	676.3	675.7	675.1	676.5
15°	666.9	667.1	667.2	667.4	667.6	667.4	666.9	666.4	665.8	665.3	666.9
17.5°	651.8	652.3	652.8	653.3	653.9	654.1	654.0	653.9	653.8	653.7	655.2
20°	641.2	641.7	642.2	642.8	643.3	643.6	643.8	644.0	644.1	644.3	646.0
22.5°	629.4	630.0	630.7	631.3	632.0	632.5	632.8	633.1	633.4	633.7	635.5
25°	610.1	611.1	612.2	613.2	614.2	615.0	615.5	616.0	616.6	617.1	619.0
27.5°	588.6	590.1	591.6	593.2	594.7	595.8	596.6	597.4	598.2	599.0	600.8
30°	574.3	575.7	577.0	578.4	579.8	581.1	582.3	583.5	584.7	586.0	587.9
32.5°	558.7	560.4	562.0	563.7	565.4	566.9	568.2	569.6	570.9	572.3	574.4
35°	533.8	535.9	538.0	540.0	542.1	544.0	545.7	547.5	549.2	550.9	553.4
37.5°	508.8	511.1	513.5	515.9	518.3	520.6	522.7	524.9	527.0	529.1	531.6
40°	492.6	494.8	497.1	499.3	501.6	503.9	506.3	508.7	511.2	513.6	516.2
42.5°	473.9	476.4	478.9	481.5	484.0	486.7	489.5	492.3	495.2	498.0	500.9
45°	445.1	448.4	451.7	455.0	458.2	461.5	464.8	468.1	471.4	474.7	477.6
47.5°	417.6	420.9	424.3	427.7	431.1	434.7	438.5	442.3	446.1	449.9	453.0
50°	397.6	401.4	405.2	409.1	412.9	416.7	420.5	424.3	428.1	431.9	435.3
52.5°	377.7	381.5	385.3	389.1	392.9	397.0	401.4	405.7	410.1	414.4	417.9
55°	348.6	352.2	355.9	359.5	363.1	367.5	372.7	377.9	383.1	388.3	391.8
57.5°	316.1	320.6	325.1	329.6	334.1	338.9	344.0	349.2	354.4	359.5	363.6
60°	294.9	299.4	303.9	308.4	312.9	318.0	323.7	329.4	335.1	340.8	344.8
62.5°	274.4	279.3	284.2	289.1	294.0	299.3	305.0	310.7	316.5	322.2	326.1
65°	241.2	246.8	252.3	257.8	263.4	269.1	274.9	280.8	286.7	292.6	296.9
67.5°	209.3	215.2	221.1	227.0	232.8	238.9	245.2	251.5	257.8	264.1	268.5
70°	187.5	193.4	199.3	205.2	211.1	217.3	223.8	230.4	237.0	243.6	248.2
72.5°	166.4	172.4	178.4	184.4	190.4	196.9	203.9	210.9	217.9	224.9	229.4
75°	133.8	140.2	146.6	153.0	159.4	166.3	173.5	180.8	188.1	195.3	200.2
77.5°	103.5	110.3	117.1	123.8	130.6	137.8	145.4	153.0	160.6	168.2	173.1
80°	84.8	91.7	98.7	105.6	112.5	119.7	127.4	135.0	142.6	150.2	155.4
82.5°	66.1	73.3	80.5	87.7	94.9	102.3	109.9	117.5	125.1	132.8	138.1
85°	41.2	48.5	55.8	63.0	70.3	77.8	85.6	93.4	101.2	108.9	114.1
87.5°	23.3	30.8	38.5	45.8	53.1	60.4	69.4	77.0	85.0	93.0	97.8
90°	13.6	22.9	33.3	41.3	49.4	56.6	71.0	78.4	88.2	98.0	101.8
92.5°	25.1	37.3	54.5	74.9	98.1	129.1	195.5	293.2	388.4	441.9	385.2
95°	48.5	57.7	75.0	95.8	129.4	184.6	292.8	490.4	775.2	1014.7	1046.1
97.5°	78.0	82.9	97.8	116.6	145.5	192.4	277.2	441.6	724.7	1060.3	1290.8
100°	96.9	101.4	114.0	132.4	159.0	201.8	277.1	415.2	659.0	993.4	1295.5
102.5°	115.5	121.3	132.4	149.4	174.5	215.1	283.7	405.8	614.2	911.3	1222.6
105°	143.0	149.9	159.2	176.6	200.9	239.6	301.7	404.6	573.7	813.6	1091.0
107.5°	174.9	180.0	188.7	206.4	229.2	266.9	324.1	418.0	563.0	757.1	984.2
110°	195.6	200.4	208.6	225.0	248.3	283.9	341.1	428.5	562.4	736.9	930.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	215.5	219.9	228.8	244.0	267.0	302.4	357.4	439.9	565.1	725.4	898.2
115°	244.0	249.1	258.8	271.9	295.6	330.5	382.5	457.8	571.4	716.3	866.6
117.5°	274.6	278.7	286.9	300.6	322.2	357.8	407.1	476.4	578.5	710.5	849.6
120°	294.4	297.2	305.9	319.2	339.5	374.8	423.9	489.4	583.9	707.4	839.8
122.5°	313.0	315.4	323.6	335.6	357.3	391.3	440.2	501.7	589.4	703.4	829.3
125°	336.6	341.1	347.9	360.5	382.4	417.0	463.2	520.9	598.5	698.1	812.9
127.5°	358.1	361.6	369.8	384.3	407.1	441.4	485.2	537.6	604.8	690.8	791.6
130°	369.5	374.0	383.1	400.4	422.3	457.3	499.6	547.6	609.7	686.8	778.2
132.5°	381.6	385.2	397.1	413.4	437.2	470.0	511.7	558.3	614.2	683.4	766.3
135°	397.8	402.4	414.1	433.8	458.2	489.0	528.6	571.6	620.5	677.5	747.6
137.5°	414.8	419.0	431.6	450.3	475.4	504.5	540.8	580.5	623.3	673.7	731.7
140°	426.8	430.2	442.8	462.4	486.6	514.5	549.5	586.9	626.5	670.9	723.1
142.5°	439.2	442.7	454.5	473.3	496.7	523.6	557.5	591.7	629.3	669.6	716.0
145°	457.4	460.8	472.2	488.3	510.2	535.7	565.9	597.3	631.0	667.0	705.2
147.5°	478.1	479.1	489.2	505.7	523.9	546.8	575.2	602.6	632.1	662.8	695.7
150°	491.1	492.1	501.3	515.0	532.3	554.3	579.8	605.4	632.1	660.0	689.1
152.5°	502.6	502.8	512.1	525.0	540.6	560.8	583.6	607.3	630.3	655.4	681.6
155°	519.4	520.6	527.5	539.2	552.0	569.4	589.1	608.9	627.5	648.4	670.5
157.5°	535.9	535.9	542.4	551.5	562.6	576.4	593.1	608.9	624.5	641.2	659.1
160°	546.1	546.1	550.8	558.9	568.2	581.0	594.9	608.9	621.7	635.6	650.7
162.5°	555.4	554.5	558.2	565.4	573.8	583.8	596.8	608.9	618.9	630.0	643.3
165°	565.9	565.9	568.2	574.0	579.8	586.8	597.3	606.6	613.5	621.7	631.0
167.5°	576.4	575.2	576.4	580.8	584.0	589.4	597.0	603.8	608.0	613.3	619.8
170°	581.0	579.8	581.0	584.5	586.8	590.3	596.1	601.9	604.2	607.7	612.4
172.5°	585.6	584.5	584.7	587.3	588.7	591.2	595.2	600.1	600.5	602.1	605.9
175°	590.3	589.1	589.1	590.3	591.5	591.5	593.8	597.3	596.1	596.1	598.4
177.5°	592.4	591.5	590.5	591.5	591.5	591.5	592.4	594.2	592.4	592.4	593.3
180°	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	692.5	693.4	694.4	694.8	694.7	694.5	694.4	694.3
5°	690.7	692.0	693.4	694.0	693.9	693.7	693.5	693.3
7.5°	687.0	688.5	690.1	690.8	690.6	690.4	690.2	690.1
10°	683.2	684.8	686.3	687.0	686.9	686.7	686.5	686.3
12.5°	678.0	679.4	680.8	681.5	681.5	681.4	681.4	681.4
15°	668.4	670.0	671.5	672.2	672.1	671.9	671.7	671.5
17.5°	656.8	658.4	660.0	660.7	660.6	660.5	660.3	660.2
20°	647.8	649.5	651.2	652.1	652.1	652.1	652.1	652.1
22.5°	637.2	638.9	640.6	641.7	641.9	642.2	642.5	642.8
25°	620.9	622.8	624.7	625.7	625.9	626.1	626.2	626.4
27.5°	602.6	604.3	606.1	607.1	607.3	607.5	607.7	607.9
30°	589.8	591.7	593.6	594.7	595.0	595.4	595.7	596.1
32.5°	576.6	578.8	581.0	582.2	582.6	582.9	583.3	583.6
35°	555.8	558.2	560.6	562.1	562.6	563.1	563.6	564.2
37.5°	534.1	536.5	539.0	540.5	541.0	541.6	542.1	542.7
40°	518.8	521.4	524.0	525.6	526.3	527.0	527.7	528.4
42.5°	503.8	506.6	509.5	511.2	511.8	512.3	512.9	513.4
45°	480.6	483.5	486.4	488.3	489.2	490.1	490.9	491.8
47.5°	456.0	459.1	462.1	464.1	465.2	466.2	467.3	468.3
50°	438.8	442.3	445.7	448.0	449.0	450.0	451.1	452.1
52.5°	421.4	424.8	428.3	430.5	431.6	432.6	433.6	434.7
55°	395.2	398.7	402.1	404.4	405.4	406.5	407.5	408.5
57.5°	367.7	371.9	376.0	378.5	379.5	380.4	381.4	382.4
60°	348.8	352.8	356.7	359.4	360.8	362.2	363.6	365.0
62.5°	330.1	334.1	338.1	340.7	342.1	343.5	344.9	346.3
65°	301.2	305.6	309.9	312.7	314.1	315.5	316.9	318.3
67.5°	272.9	277.3	281.7	284.5	285.9	287.2	288.6	289.9
70°	252.9	257.6	262.2	265.2	266.4	267.6	268.8	270.0
72.5°	233.9	238.5	243.0	245.9	247.3	248.6	250.0	251.3
75°	205.0	209.8	214.7	217.9	219.4	221.0	222.6	224.1
77.5°	178.1	183.0	187.9	191.2	192.8	194.5	196.1	197.8
80°	160.6	165.7	170.9	174.2	175.6	177.0	178.4	179.8
82.5°	143.4	148.7	154.1	157.5	159.0	160.5	162.0	163.6
85°	119.3	124.5	129.7	133.2	134.9	136.6	138.3	140.1
87.5°	103.1	108.3	113.6	116.8	118.6	120.3	121.6	123.2
90°	108.0	114.2	120.3	123.5	126.1	128.6	128.8	130.2
92.5°	311.3	259.7	229.5	209.3	197.0	192.1	189.6	190.9
95°	938.1	762.6	611.6	502.0	446.6	412.2	392.8	379.2
97.5°	1344.1	1281.7	1172.6	1054.3	972.3	903.9	870.5	847.8
100°	1469.9	1497.8	1445.5	1362.4	1262.6	1192.9	1159.2	1151.2
102.5°	1460.0	1579.8	1600.8	1567.9	1507.2	1457.2	1421.9	1415.8
105°	1361.4	1566.8	1686.2	1736.7	1740.4	1732.4	1717.6	1712.0
107.5°	1224.1	1442.4	1608.6	1715.0	1773.7	1801.4	1814.3	1818.5
110°	1141.1	1346.1	1518.6	1649.1	1733.0	1783.1	1805.4	1817.3



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CATALOG NUMBER: S124DIP-S575D1205U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1079.1	1260.8	1423.8	1554.2	1649.3	1709.7	1740.4	1758.7
115°	1015.6	1162.3	1302.1	1416.2	1509.2	1580.1	1618.5	1629.0
117.5°	981.7	1103.6	1214.1	1311.2	1390.9	1450.8	1489.9	1498.4
120°	965.3	1076.8	1173.3	1258.2	1325.8	1378.3	1409.9	1424.1
122.5°	951.0	1058.8	1146.9	1221.5	1278.8	1323.7	1350.5	1364.6
125°	927.7	1031.0	1114.4	1180.5	1228.0	1262.8	1285.9	1293.9
127.5°	899.5	998.1	1081.2	1144.0	1191.9	1223.0	1242.8	1250.9
130°	877.8	972.7	1054.8	1118.5	1167.2	1197.3	1216.9	1224.9
132.5°	855.5	944.7	1024.8	1088.4	1136.2	1170.0	1188.7	1196.7
135°	823.6	901.9	975.6	1035.6	1083.1	1116.7	1136.3	1144.3
137.5°	795.1	861.6	923.8	978.1	1022.4	1055.3	1071.5	1080.7
140°	778.8	835.6	890.2	940.5	982.1	1008.5	1025.6	1035.8
142.5°	764.0	814.0	860.9	904.5	941.3	965.7	980.8	988.1
145°	743.4	784.0	819.9	853.3	883.0	903.5	915.8	922.3
147.5°	726.5	758.0	786.1	812.0	833.9	851.4	860.8	863.5
150°	717.0	743.7	766.9	787.8	806.4	821.5	828.5	829.7
152.5°	706.7	729.7	751.1	768.3	784.1	796.4	800.6	801.8
155°	691.4	710.0	727.4	741.4	753.0	762.3	765.8	765.8
157.5°	674.9	690.5	705.1	716.3	725.1	732.1	734.2	734.2
160°	664.7	677.4	690.2	699.5	706.5	713.5	714.6	714.6
162.5°	654.4	665.4	675.4	683.7	688.8	695.8	697.0	696.0
165°	640.3	647.2	655.4	661.2	665.8	670.5	669.3	668.2
167.5°	626.6	631.9	638.4	641.9	644.2	647.2	647.0	646.1
170°	618.2	621.7	626.3	629.8	632.1	633.3	632.1	632.1
172.5°	610.7	613.3	616.1	618.6	620.0	621.2	620.0	618.2
175°	600.8	601.9	604.2	604.2	604.2	606.6	604.2	601.9
177.5°	594.2	595.2	595.2	596.1	595.2	596.1	594.2	592.4
180°	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5

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