

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: P333204-840

Luminaire Tested: **S125DIP-S610D1205U840-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333204-840
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-S610D1205U840-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 6891.6 lumens
Efficiency: N/A
Efficacy: 139.5 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: Semi-Indirect

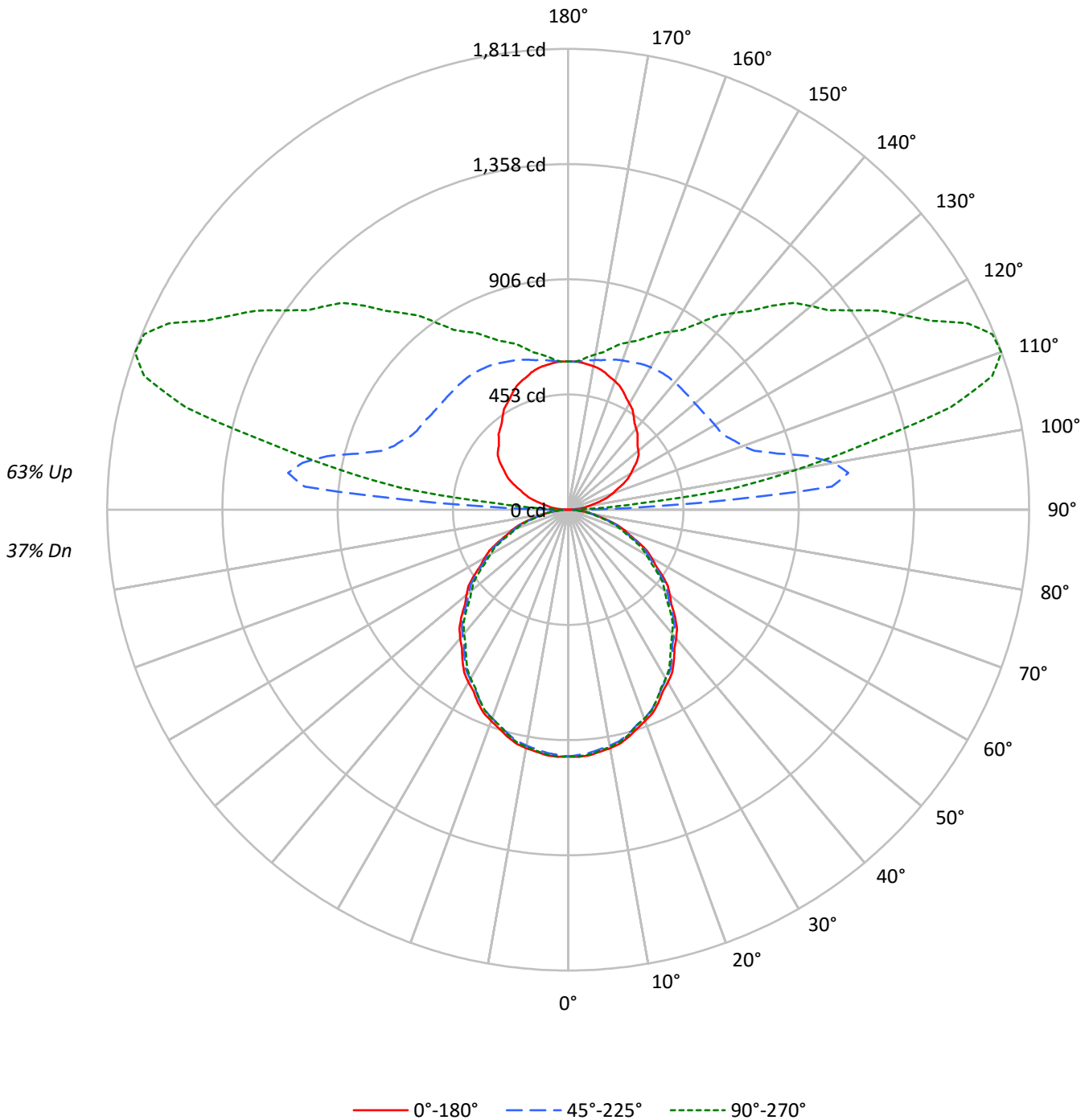
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	39	38	37	31
2	86	79	73	68	78	72	67	62	58	54	51	46	43	41	34	32	31	26
3	79	69	62	56	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	61	54	48	65	56	49	44	45	41	37	36	32	30	27	25	23	19
5	66	54	47	41	59	50	43	38	41	35	31	32	28	26	24	22	20	16
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17	14
7	56	44	36	31	51	40	33	28	33	28	24	26	23	20	20	17	15	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6264	6264	6264
5°	6278	6218	6257
10°	6239	6174	6209
15°	6171	6100	6125
20°	6075	5996	6006
25°	5971	5872	5867
30°	5842	5739	5711
35°	5705	5595	5517
40°	5563	5440	5363
45°	5411	5298	5193
50°	5243	5127	4972
55°	5080	4933	4796
60°	4886	4738	4570
65°	4655	4504	4351
70°	4434	4232	4086
75°	4040	3905	3773
80°	3593	3537	3451
85°	3127	3179	3016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	1.3
10°-20°	258.3	3.7
20°-30°	381.4	5.5
30°-40°	445.0	6.5
40°-50°	447.0	6.5
50°-60°	392.4	5.7
60°-70°	292.4	4.2
70°-80°	167.2	2.4
80°-90°	51.9	0.8
90°-100°	421.9	6.1
100°-110°	906.9	13.2
110°-120°	851.1	12.3
120°-130°	689.8	10.0
130°-140°	553.5	8.0
140°-150°	417.7	6.1
150°-160°	294.0	4.3
160°-170°	173.3	2.5
170°-180°	56.4	0.8
0°-30°	731.2	10.6
0°-40°	1176.2	17.1
0°-60°	2015.6	29.2
0°-90°	2526.9	36.7
90°-120°	2179.9	31.6
90°-150°	3840.9	55.7
90°-180°	4365.0	63.3
0°-180°	6891.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	968	966	959	966	965	92
15°	923	920	912	916	916	260
25°	838	834	824	825	823	385
35°	724	720	710	706	700	452
45°	592	589	580	571	569	456
55°	451	448	438	431	426	403
65°	305	303	295	288	285	302
75°	162	160	156	154	151	173
85°	42	43	43	42	41	47
90°	1	11	19	25	27	5
95°	39	114	1040	472	276	41
105°	133	185	851	1675	1555	140
115°	237	286	683	1472	1732	233
125°	328	385	655	1171	1365	291
135°	385	463	650	982	1134	299
145°	448	513	652	813	894	281
155°	512	550	636	719	750	236
165°	559	574	610	647	657	157
175°	581	581	586	593	590	55
180°	582	582	582	582	582	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	972.3	971.9	971.5	971.1	970.7	969.8	968.5	967.0	965.7	964.3	965.7
5°	968.4	968.0	967.7	967.2	966.9	965.9	964.2	962.5	960.8	959.1	960.7
7.5°	959.4	959.1	958.8	958.4	958.1	956.9	955.0	953.2	951.3	949.5	950.9
10°	951.4	951.1	950.8	950.4	950.1	949.0	947.1	945.2	943.3	941.5	942.8
12.5°	941.6	941.0	940.4	939.8	939.2	938.0	936.2	934.5	932.7	931.0	932.1
15°	923.0	922.5	922.0	921.5	921.0	919.8	918.0	916.0	914.1	912.3	913.1
17.5°	901.7	901.0	900.2	899.5	898.7	897.4	895.4	893.4	891.5	889.6	890.6
20°	883.9	883.5	883.2	882.9	882.5	881.3	879.1	876.9	874.6	872.4	873.6
22.5°	866.1	865.5	864.8	864.2	863.6	862.3	860.2	858.2	856.1	853.9	854.7
25°	837.9	837.0	836.2	835.4	834.5	832.9	830.7	828.5	826.3	824.0	824.5
27.5°	804.9	804.4	803.9	803.3	802.8	801.4	799.1	796.9	794.6	792.3	792.3
30°	783.4	782.8	782.3	781.8	781.3	779.8	777.3	774.7	772.1	769.6	769.2
32.5°	760.0	759.3	758.5	757.7	756.9	755.4	753.2	750.8	748.5	746.3	745.7
35°	723.6	722.9	722.2	721.5	720.8	719.3	716.9	714.5	712.2	709.7	708.9
37.5°	685.6	684.8	684.0	683.1	682.3	680.6	678.4	676.2	673.9	671.7	670.4
40°	659.8	659.0	658.1	657.3	656.4	654.8	652.5	650.1	647.6	645.3	643.8
42.5°	632.3	631.6	630.8	630.1	629.3	627.8	625.4	623.1	620.7	618.2	616.9
45°	592.4	591.7	591.0	590.3	589.7	588.2	586.2	584.2	582.1	580.1	578.0
47.5°	549.4	549.4	549.5	549.5	549.5	548.3	545.8	543.4	541.0	538.5	536.4
50°	521.8	521.2	520.7	520.2	519.7	518.5	516.3	514.3	512.3	510.3	508.1
52.5°	493.5	493.1	492.8	492.4	492.0	490.7	488.6	486.4	484.2	482.0	480.1
55°	451.2	450.6	450.1	449.6	449.1	447.7	445.2	442.9	440.5	438.1	436.6
57.5°	406.5	406.3	406.0	405.7	405.5	404.2	402.2	400.2	398.2	396.3	394.3
60°	378.3	377.6	376.9	376.2	375.6	374.3	372.4	370.5	368.6	366.8	365.1
62.5°	348.8	348.3	347.7	347.2	346.6	345.6	344.0	342.3	340.7	339.1	337.3
65°	304.6	304.3	304.0	303.6	303.3	302.2	300.2	298.4	296.5	294.7	293.1
67.5°	261.8	261.1	260.3	259.6	258.9	257.9	256.5	255.1	253.7	252.3	251.0
70°	234.8	234.0	233.1	232.3	231.4	230.1	228.6	227.1	225.6	224.1	223.0
72.5°	205.3	204.7	204.2	203.6	203.0	202.2	201.3	200.3	199.2	198.2	197.1
75°	161.9	161.6	161.2	160.9	160.6	160.0	159.1	158.2	157.3	156.5	156.0
77.5°	121.9	121.7	121.6	121.4	121.3	121.0	120.5	120.1	119.6	119.1	118.8
80°	96.6	96.6	96.6	96.6	96.6	96.5	96.1	95.8	95.5	95.1	94.9
82.5°	74.6	74.3	74.0	73.7	73.5	73.3	73.2	73.2	73.1	73.0	72.7
85°	42.2	42.4	42.5	42.7	42.9	42.9	42.9	42.9	42.9	42.9	42.8
87.5°	16.8	17.1	17.5	18.0	18.5	18.9	19.0	19.3	19.4	19.7	20.0
90°	1.2	2.3	4.6	7.1	9.4	11.7	12.9	15.2	16.5	18.8	20.0
92.5°	14.3	17.4	27.3	41.8	62.0	96.2	160.3	267.8	384.5	378.3	306.3
95°	38.7	39.9	49.3	62.2	88.0	140.8	266.4	524.5	848.4	1039.7	1017.3
97.5°	64.3	65.7	72.3	85.2	108.5	146.4	229.5	418.7	757.6	1110.2	1287.3
100°	82.1	84.5	89.2	102.1	124.4	159.6	227.6	380.2	675.9	1059.6	1352.9
102.5°	101.9	103.3	107.0	120.9	141.3	175.5	236.1	364.3	613.9	970.4	1313.5
105°	132.6	132.6	138.5	150.2	169.0	201.9	253.5	357.9	553.8	850.7	1187.5
107.5°	162.6	165.0	170.6	180.3	199.8	229.2	279.2	368.7	528.5	768.3	1058.9
110°	184.2	186.6	191.3	201.9	219.4	249.9	298.0	379.0	521.0	729.8	985.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	205.8	208.1	211.9	222.5	240.0	269.6	315.9	392.1	521.0	707.3	931.2
115°	237.0	239.3	242.9	253.5	271.0	300.4	343.9	411.8	524.5	683.0	871.8
117.5°	265.2	268.7	272.5	283.1	303.0	331.3	372.4	434.4	532.3	671.0	836.4
120°	284.0	287.5	292.2	302.8	322.7	352.0	393.1	449.4	539.8	665.3	816.7
122.5°	303.7	306.3	310.0	320.5	342.4	371.7	412.8	466.4	546.3	660.7	799.8
125°	328.5	330.9	336.8	347.3	369.6	400.1	438.9	489.3	557.3	654.8	776.8
127.5°	348.0	351.5	359.1	372.4	396.2	426.7	463.9	510.5	569.8	652.0	755.7
130°	360.2	363.8	373.1	388.4	413.0	443.5	479.9	524.5	577.3	650.1	741.6
132.5°	369.6	374.1	385.4	402.5	428.1	458.6	494.9	536.7	585.7	650.1	730.3
135°	384.9	389.6	403.6	422.4	447.1	478.8	515.1	553.8	597.2	650.1	717.0
137.5°	404.1	407.7	420.8	439.6	463.7	496.3	529.5	566.5	607.8	651.5	705.0
140°	415.4	418.9	433.0	451.8	474.0	505.7	539.8	575.0	612.5	652.4	699.3
142.5°	428.5	431.1	444.2	463.0	484.4	514.2	546.3	579.7	615.3	653.4	694.7
145°	448.3	450.6	462.3	478.8	499.9	526.8	557.3	586.7	618.4	652.4	687.6
147.5°	468.9	470.3	480.4	495.6	513.9	537.7	564.4	591.0	619.6	649.3	680.3
150°	481.1	483.4	491.7	507.0	523.3	543.3	569.1	593.8	619.6	646.5	674.7
152.5°	494.2	495.6	502.9	516.3	531.8	549.9	573.8	595.6	618.6	642.8	668.1
155°	511.6	511.6	518.7	530.4	542.1	558.6	578.5	597.2	616.0	636.0	657.1
157.5°	527.1	526.8	532.5	542.6	552.9	565.3	582.5	598.4	613.0	628.9	646.8
160°	537.5	536.2	541.0	549.2	558.6	569.1	584.4	598.4	610.2	624.3	638.3
162.5°	545.8	544.7	549.4	556.6	564.2	572.9	586.2	597.5	607.3	618.6	630.9
165°	558.6	556.2	559.8	565.6	570.3	577.3	586.7	596.1	603.1	610.2	619.6
167.5°	567.0	565.8	567.9	571.2	574.5	579.0	586.7	593.3	596.5	602.0	608.5
170°	572.6	571.5	572.6	575.0	577.3	580.9	586.7	591.4	593.8	597.2	602.0
172.5°	576.4	574.3	575.4	577.7	579.2	580.9	585.7	589.6	590.0	591.7	595.4
175°	580.9	578.5	579.7	580.9	580.9	580.9	584.4	586.7	585.5	585.5	586.7
177.5°	583.0	581.1	581.1	582.0	581.1	581.1	583.0	583.9	582.0	582.0	583.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	967.0	968.5	969.8	970.4	970.3	970.1	970.0	969.9
5°	962.2	963.7	965.2	965.9	965.7	965.6	965.4	965.2
7.5°	952.4	953.9	955.4	956.1	955.9	955.7	955.6	955.4
10°	944.2	945.5	947.0	947.6	947.4	947.2	947.0	946.8
12.5°	933.2	934.3	935.3	935.9	935.8	935.8	935.8	935.7
15°	914.0	914.8	915.7	916.1	916.1	916.1	916.1	916.1
17.5°	891.7	892.7	893.8	893.9	893.0	892.2	891.4	890.5
20°	874.7	876.0	877.2	877.4	876.5	875.7	874.7	873.9
22.5°	855.6	856.4	857.2	857.3	856.7	856.1	855.5	855.0
25°	824.8	825.1	825.5	825.4	824.9	824.4	823.8	823.3
27.5°	792.4	792.5	792.5	792.3	791.8	791.3	790.8	790.3
30°	768.9	768.6	768.2	767.8	767.3	766.8	766.3	765.8
32.5°	745.1	744.4	743.8	743.1	742.1	741.2	740.2	739.3
35°	708.0	707.2	706.3	705.2	703.9	702.5	701.1	699.7
37.5°	669.1	667.9	666.6	665.6	664.8	664.1	663.3	662.5
40°	642.2	640.7	639.1	638.1	637.6	637.1	636.6	636.1
42.5°	615.5	614.1	612.7	611.6	610.8	610.1	609.3	608.4
45°	575.9	573.9	571.9	570.6	570.1	569.6	569.1	568.6
47.5°	534.3	532.2	530.2	528.6	527.4	526.1	524.9	523.7
50°	505.8	503.6	501.4	499.7	498.5	497.3	496.0	494.9
52.5°	478.1	476.2	474.2	472.6	471.3	469.9	468.6	467.3
55°	435.0	433.5	432.0	430.6	429.4	428.2	427.1	425.9
57.5°	392.2	390.3	388.3	387.0	386.4	385.7	385.1	384.5
60°	363.3	361.6	359.9	358.5	357.3	356.1	354.9	353.8
62.5°	335.5	333.7	331.7	330.4	329.5	328.5	327.6	326.7
65°	291.5	290.0	288.5	287.4	286.7	286.0	285.4	284.7
67.5°	249.7	248.4	247.1	246.2	245.8	245.4	245.0	244.6
70°	222.0	221.0	219.9	219.1	218.4	217.7	217.0	216.4
72.5°	195.9	194.8	193.6	192.7	192.0	191.4	190.7	190.0
75°	155.5	155.0	154.5	153.9	153.2	152.5	151.9	151.2
77.5°	118.5	118.2	117.9	117.4	116.9	116.5	116.0	115.5
80°	94.8	94.6	94.4	94.2	93.8	93.5	93.2	92.8
82.5°	72.4	72.1	71.8	71.6	71.6	71.5	71.4	71.4
85°	42.6	42.4	42.3	42.0	41.7	41.3	41.0	40.7
87.5°	20.2	20.4	20.7	21.0	20.7	20.4	20.4	20.1
90°	21.1	22.3	23.4	25.9	25.9	25.9	27.0	27.0
92.5°	207.9	150.9	113.6	96.2	81.2	78.4	76.7	74.8
95°	843.6	665.3	521.0	422.4	339.1	303.9	294.6	275.8
97.5°	1256.5	1131.5	990.9	853.7	781.2	715.6	681.6	666.5
100°	1443.3	1385.8	1265.0	1142.9	1062.0	977.4	934.0	915.2
102.5°	1506.2	1541.7	1483.7	1401.1	1314.4	1254.4	1207.2	1193.2
105°	1469.2	1629.9	1681.5	1668.6	1631.0	1592.4	1568.8	1554.8
107.5°	1336.8	1551.3	1683.8	1745.1	1764.1	1763.9	1756.2	1746.8
110°	1239.1	1462.1	1627.5	1727.3	1780.1	1802.4	1810.6	1810.6



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CATALOG NUMBER: S125DIP-S610D1205U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1162.2	1373.8	1541.2	1658.7	1736.0	1774.2	1794.6	1803.1
115°	1065.5	1247.4	1408.1	1536.0	1627.5	1683.8	1716.7	1731.9
117.5°	1003.0	1159.8	1298.3	1415.6	1507.1	1565.4	1598.0	1607.3
120°	969.3	1110.0	1239.1	1342.4	1429.3	1485.5	1517.2	1526.6
122.5°	943.9	1074.4	1189.4	1286.1	1363.5	1415.1	1446.8	1455.3
125°	907.1	1026.7	1128.8	1213.4	1279.0	1327.2	1352.9	1364.7
127.5°	869.5	981.2	1076.5	1155.6	1215.2	1257.7	1282.1	1287.3
130°	846.1	949.3	1040.9	1117.1	1175.8	1214.5	1238.0	1245.0
132.5°	822.5	919.3	1002.3	1075.8	1134.5	1173.2	1194.8	1202.7
135°	792.0	873.0	948.2	1015.0	1066.6	1105.4	1126.5	1133.6
137.5°	766.3	831.7	894.1	951.0	997.1	1032.4	1051.9	1059.6
140°	752.1	807.3	861.3	910.6	954.0	984.5	1002.1	1007.9
142.5°	739.9	786.7	833.1	875.9	912.7	938.5	955.1	960.1
145°	724.0	760.3	796.8	828.4	856.6	876.6	889.5	894.1
147.5°	709.0	738.5	766.5	790.4	812.7	828.7	836.2	838.3
150°	700.5	726.4	748.6	769.7	787.4	801.4	806.2	807.3
152.5°	691.2	714.2	734.6	751.0	765.8	777.0	781.7	782.9
155°	677.0	695.8	712.3	725.2	736.9	745.1	748.6	749.8
157.5°	663.0	678.4	691.2	701.3	710.3	717.2	720.4	720.2
160°	653.6	665.3	677.0	685.3	693.5	699.3	701.8	700.5
162.5°	643.3	654.1	663.9	671.2	677.5	682.5	683.0	682.7
165°	628.9	637.1	644.2	650.1	654.8	657.1	657.1	657.1
167.5°	615.3	620.8	626.1	630.4	632.7	634.8	633.9	633.7
170°	607.8	611.4	614.9	617.2	619.6	620.8	620.8	619.6
172.5°	599.4	602.9	605.5	606.9	607.3	609.5	607.6	606.4
175°	590.3	590.3	592.6	592.6	592.6	593.8	591.4	590.3
177.5°	583.9	584.8	584.8	584.8	583.9	584.8	582.0	582.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0

(END OF REPORT)