

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: P333255-927

Luminaire Tested: **S125DIP-S1090D365U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333255-927
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-S1090D365U927-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4420.7 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

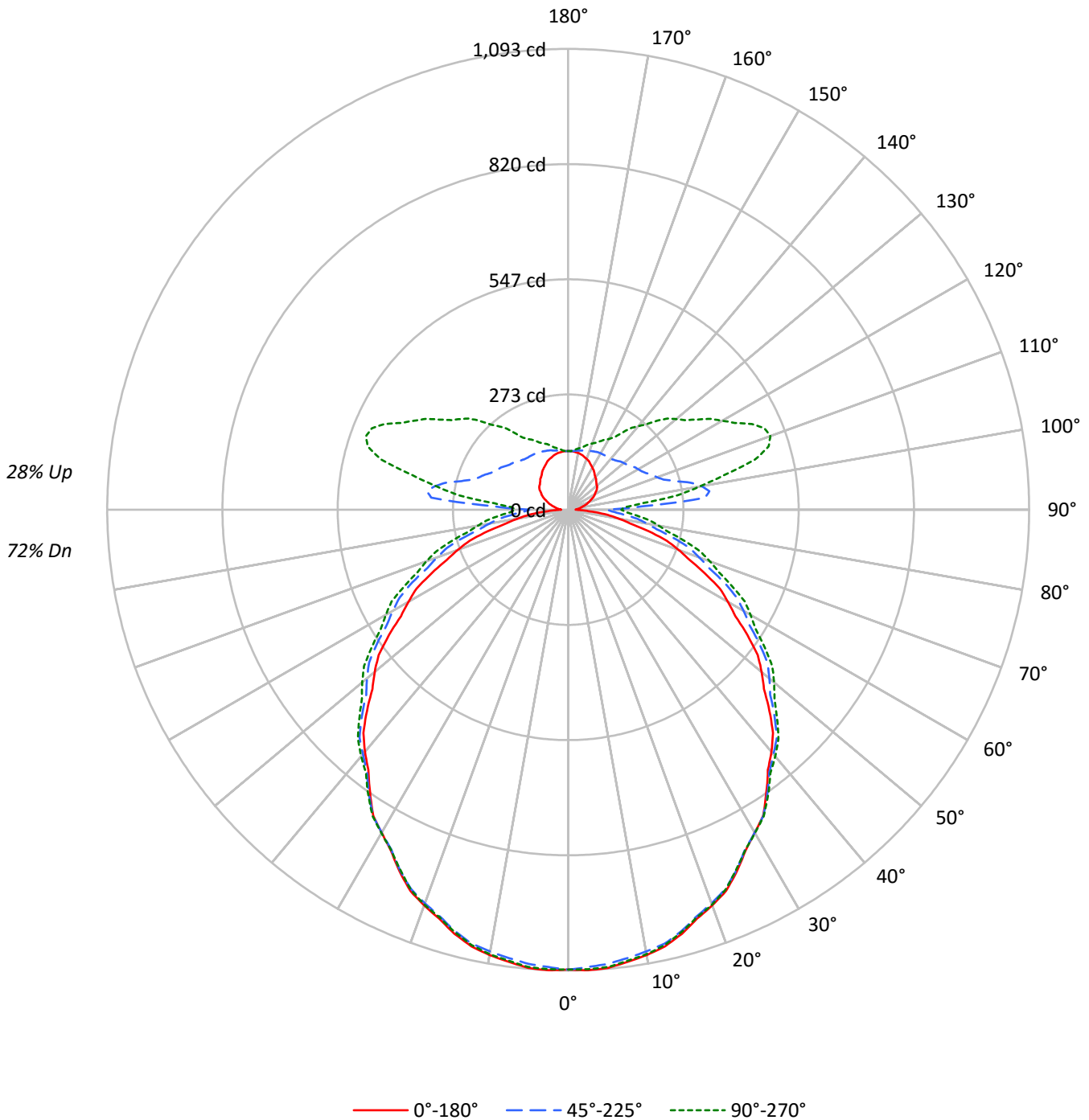
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	102	97	92	88	96	92	88	84	82	79	76	74	71	69	66	64	62	58
2	92	84	77	71	87	80	73	68	71	67	62	64	60	57	57	54	52	48
3	84	73	65	59	79	70	62	57	63	57	52	56	52	48	50	47	43	40
4	77	65	56	50	72	62	54	48	56	49	44	50	45	41	45	41	37	34
5	70	58	49	43	66	55	47	41	50	43	38	45	39	35	40	36	32	29
6	65	52	43	37	61	49	41	36	45	38	33	41	35	31	36	32	28	26
7	60	47	38	32	57	45	37	31	41	34	29	37	31	27	33	29	25	23
8	56	43	34	29	53	41	33	28	37	31	26	34	28	24	31	26	22	20
9	52	39	31	26	49	37	30	25	34	28	23	31	26	22	28	24	20	18
10	49	36	28	23	46	34	27	22	31	25	21	29	23	20	26	22	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7045	7045	7045
5°	7059	6915	6937
10°	7008	6791	6781
15°	6926	6644	6583
20°	6814	6461	6385
25°	6679	6266	6141
30°	6517	6050	5920
35°	6366	5853	5717
40°	6211	5644	5513
45°	6037	5466	5331
50°	5872	5272	5172
55°	5671	5090	4983
60°	5453	4881	4791
65°	5225	4664	4575
70°	4967	4366	4353
75°	4557	4080	4079
80°	4018	3734	3783
85°	3519	3499	3689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	2.3
10°-20°	292.8	6.6
20°-30°	435.5	9.9
30°-40°	515.8	11.7
40°-50°	533.3	12.1
50°-60°	491.3	11.1
60°-70°	397.1	9.0
70°-80°	265.9	6.0
80°-90°	138.7	3.1
90°-100°	178.0	4.0
100°-110°	273.4	6.2
110°-120°	241.3	5.5
120°-130°	186.3	4.2
130°-140°	141.6	3.2
140°-150°	101.6	2.3
150°-160°	70.2	1.6
160°-170°	41.4	0.9
170°-180°	13.5	0.3
0°-30°	831.4	18.8
0°-40°	1347.2	30.5
0°-60°	2371.8	53.7
0°-90°	3173.5	71.8
90°-120°	692.8	15.7
90°-150°	1122.2	25.4
90°-180°	1247.0	28.2
0°-180°	4420.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1091	1088	1081	1089	1089	103
15°	1042	1042	1035	1041	1037	293
25°	946	949	943	947	942	435
35°	819	826	824	826	827	512
45°	675	686	692	699	700	521
55°	519	536	553	564	569	463
65°	357	382	407	423	428	354
75°	197	225	259	279	286	209
85°	59	94	132	154	164	63
90°	17	54	92	117	126	12
95°	23	70	326	213	175	21
105°	41	72	262	479	459	44
115°	63	83	205	411	481	62
125°	83	96	181	320	373	73
135°	94	112	164	256	298	73
145°	108	123	156	199	223	67
155°	122	131	152	171	179	56
165°	133	137	146	154	157	38
175°	139	139	140	141	141	13
180°	139	139	139	139	139	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1093.4	1093.0	1092.6	1092.3	1091.9	1091.0	1089.6	1088.3	1087.0	1085.7	1087.0
5°	1090.8	1090.4	1089.9	1089.4	1088.9	1087.8	1086.2	1084.5	1082.8	1081.2	1083.1
7.5°	1081.2	1081.0	1080.8	1080.6	1080.5	1079.5	1077.8	1076.0	1074.4	1072.6	1074.3
10°	1072.6	1072.6	1072.6	1072.6	1072.6	1071.7	1069.8	1067.9	1066.0	1064.1	1065.7
12.5°	1060.7	1060.8	1061.0	1061.2	1061.4	1060.7	1059.2	1057.7	1056.2	1054.6	1056.0
15°	1041.6	1041.9	1042.1	1042.4	1042.6	1041.9	1040.2	1038.6	1036.9	1035.2	1036.6
17.5°	1016.8	1017.2	1017.7	1018.2	1018.7	1018.1	1016.4	1014.8	1013.1	1011.5	1012.6
20°	998.9	999.3	999.8	1000.3	1000.8	1000.1	998.5	996.8	995.1	993.5	994.2
22.5°	978.3	979.1	980.0	980.9	981.8	981.2	979.4	977.6	975.7	973.8	974.7
25°	946.4	947.1	947.8	948.6	949.3	949.0	947.5	946.1	944.7	943.3	944.2
27.5°	910.9	912.0	913.0	914.1	915.1	914.8	913.2	911.6	910.0	908.4	909.0
30°	884.4	885.8	887.2	888.7	890.1	890.1	888.7	887.2	885.8	884.4	884.9
32.5°	860.5	861.7	862.9	864.2	865.4	865.5	864.4	863.4	862.4	861.3	861.8
35°	819.2	820.9	822.5	824.2	825.9	826.3	825.6	824.9	824.2	823.5	824.2
37.5°	777.9	779.4	780.9	782.4	783.9	784.7	784.4	784.2	783.9	783.7	784.7
40°	749.6	751.5	753.4	755.3	757.2	758.1	757.9	757.6	757.4	757.2	758.1
42.5°	718.8	721.4	723.8	726.3	728.7	730.2	730.8	731.3	731.8	732.4	733.5
45°	674.8	677.4	680.0	682.6	685.2	687.1	688.3	689.5	690.7	691.9	693.6
47.5°	629.7	632.1	634.5	636.9	639.4	641.6	643.6	645.7	647.8	649.7	652.2
50°	598.9	601.5	604.1	606.7	609.3	612.0	614.6	617.2	619.8	622.4	625.0
52.5°	566.3	569.6	572.7	575.9	579.1	582.3	585.5	588.7	591.8	595.0	597.9
55°	518.6	522.4	526.2	530.0	533.9	537.7	541.5	545.3	549.1	552.9	555.5
57.5°	469.9	474.4	479.0	483.6	488.1	492.7	497.0	501.4	505.7	510.1	513.1
60°	437.4	442.1	446.9	451.6	456.4	461.1	465.9	470.6	475.4	480.1	483.7
62.5°	405.8	410.5	415.3	420.0	424.8	429.7	434.8	440.0	445.1	450.2	454.2
65°	357.2	362.7	368.1	373.6	379.1	384.6	390.3	396.0	401.7	407.4	411.0
67.5°	311.4	316.7	321.9	327.3	332.5	338.0	343.9	349.7	355.5	361.2	365.6
70°	278.1	283.5	289.0	294.5	299.9	305.7	311.9	318.1	324.2	330.4	334.9
72.5°	245.6	251.2	256.8	262.5	268.2	274.3	281.1	287.9	294.6	301.3	306.3
75°	196.8	203.0	209.1	215.3	221.5	228.4	236.0	243.6	251.2	258.8	263.6
77.5°	150.0	157.1	164.2	171.3	178.5	185.7	193.0	200.3	207.6	214.9	220.1
80°	120.8	127.9	135.1	142.2	149.3	156.9	165.0	173.1	181.2	189.3	194.5
82.5°	94.3	101.8	109.3	116.8	124.4	132.2	140.5	148.8	157.1	165.3	170.4
85°	58.8	66.6	74.5	82.3	90.2	98.2	106.5	114.9	123.2	131.5	136.7
87.5°	33.4	41.1	48.8	56.5	64.2	72.2	80.3	88.5	96.6	104.8	110.4
90°	17.4	25.3	33.4	41.6	49.7	58.1	66.5	75.2	83.5	92.2	97.9
92.5°	18.9	26.5	36.0	46.5	58.3	74.1	97.7	131.6	167.7	174.5	162.6
95°	23.1	29.6	38.0	47.3	59.7	79.4	117.4	187.0	272.4	326.1	326.1
97.5°	28.0	33.8	41.0	49.6	60.8	76.4	104.1	157.0	245.7	337.6	384.8
100°	31.4	36.9	43.0	51.1	61.4	76.1	100.0	143.9	222.1	321.2	396.2
102.5°	35.2	40.2	45.6	53.6	63.1	77.2	99.1	137.1	204.1	296.6	383.2
105°	41.3	45.1	50.3	56.9	65.1	78.4	97.9	129.9	183.9	261.8	346.9
107.5°	47.1	50.9	55.5	61.1	68.9	81.0	99.8	127.9	172.9	237.0	311.0
110°	51.4	54.8	58.9	64.2	71.2	83.3	101.4	127.4	167.9	224.4	289.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	56.6	59.4	62.6	67.4	73.9	85.3	102.8	127.5	164.7	215.6	273.4
115°	63.0	65.2	67.7	71.9	77.7	88.6	105.2	127.6	160.7	204.6	254.0
117.5°	68.6	70.6	72.6	76.1	82.0	92.3	107.9	128.5	157.7	196.7	240.2
120°	73.1	74.6	76.4	79.7	85.2	95.3	110.5	129.4	156.5	191.9	232.0
122.5°	76.9	77.9	79.1	82.0	87.5	97.4	112.4	130.5	154.8	187.4	224.4
125°	82.7	83.0	84.1	86.4	91.5	101.1	115.0	131.8	152.8	180.9	213.7
127.5°	86.3	86.8	88.4	91.3	96.8	105.9	118.7	133.6	151.7	175.2	203.5
130°	89.1	89.8	91.7	95.1	100.8	109.6	121.6	135.6	151.5	172.2	197.4
132.5°	90.5	91.6	94.2	98.2	104.3	112.8	124.1	136.7	150.9	168.8	191.2
135°	94.0	94.8	98.0	102.2	107.9	116.1	126.4	137.4	149.4	163.7	182.7
137.5°	98.3	99.0	102.0	106.2	111.8	119.9	128.6	138.2	148.9	160.2	175.7
140°	100.2	101.0	104.4	108.8	114.2	121.8	130.2	138.9	148.1	157.8	171.6
142.5°	103.3	103.8	106.7	111.0	115.9	122.9	130.6	138.6	147.2	156.3	168.4
145°	108.1	108.4	110.9	114.5	119.4	125.7	133.0	140.0	147.5	155.7	165.2
147.5°	111.9	112.2	114.6	118.3	122.6	128.3	134.7	141.0	147.8	155.0	162.7
150°	114.8	115.3	117.3	121.0	124.8	129.6	135.8	141.6	147.8	154.2	161.0
152.5°	118.0	118.3	120.0	123.2	126.9	131.2	136.9	142.1	147.6	153.4	159.4
155°	122.1	122.1	123.7	126.5	129.4	133.2	138.0	142.5	146.9	151.8	156.8
157.5°	125.8	125.7	127.1	129.4	131.9	134.9	138.9	142.8	146.2	150.0	154.3
160°	128.3	127.9	129.0	131.0	133.2	135.8	139.4	142.8	145.6	148.9	152.3
162.5°	130.2	130.0	131.1	132.8	134.6	136.7	139.9	142.6	144.9	147.6	150.5
165°	133.2	132.7	133.6	134.9	136.1	137.8	140.0	142.2	143.9	145.6	147.8
167.5°	135.3	135.0	135.5	136.3	137.0	138.2	140.0	141.6	142.4	143.6	145.2
170°	136.7	136.3	136.7	137.2	137.8	138.6	140.0	141.1	141.6	142.5	143.6
172.5°	137.5	137.0	137.3	137.8	138.2	138.6	139.7	140.7	140.8	141.2	142.0
175°	138.6	138.0	138.3	138.6	138.6	138.6	139.4	140.0	139.7	139.7	140.0
177.5°	139.1	138.6	138.6	138.9	138.6	138.6	139.1	139.3	138.9	138.9	139.1
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1088.3	1089.6	1091.0	1091.5	1091.4	1091.2	1091.0	1090.8
5°	1085.0	1086.9	1088.8	1089.6	1089.4	1089.2	1088.9	1088.7
7.5°	1075.9	1077.6	1079.3	1080.0	1079.7	1079.5	1079.3	1079.0
10°	1067.4	1069.1	1070.7	1071.4	1071.2	1071.0	1070.7	1070.5
12.5°	1057.2	1058.5	1059.8	1060.1	1059.5	1058.9	1058.3	1057.6
15°	1038.1	1039.5	1040.9	1041.2	1040.2	1039.3	1038.3	1037.4
17.5°	1013.7	1014.7	1015.8	1016.1	1015.5	1014.9	1014.4	1013.8
20°	994.9	995.6	996.3	996.7	996.7	996.7	996.7	996.7
22.5°	975.7	976.5	977.4	977.6	977.0	976.4	975.9	975.3
25°	945.2	946.1	947.1	946.9	945.7	944.5	943.3	942.1
27.5°	909.7	910.4	911.0	911.2	910.7	910.3	909.8	909.4
30°	885.3	885.8	886.3	886.5	886.2	886.0	885.7	885.5
32.5°	862.3	862.8	863.2	863.3	863.1	862.8	862.6	862.4
35°	824.9	825.6	826.3	826.6	826.6	826.6	826.6	826.6
37.5°	785.6	786.6	787.5	787.9	787.8	787.7	787.6	787.5
40°	759.1	760.0	761.0	761.7	762.2	762.6	763.1	763.6
42.5°	734.6	735.8	736.9	737.5	737.6	737.7	737.8	737.9
45°	695.2	696.9	698.5	699.5	699.7	700.0	700.2	700.4
47.5°	654.7	657.0	659.5	660.9	661.5	662.0	662.5	663.1
50°	627.6	630.3	632.9	634.5	635.3	636.0	636.7	637.4
52.5°	600.6	603.4	606.3	607.9	608.4	609.0	609.5	610.0
55°	558.1	560.7	563.3	565.1	566.1	567.0	568.0	568.9
57.5°	516.1	519.1	522.1	523.9	524.7	525.4	526.1	526.8
60°	487.3	490.8	494.4	496.5	497.3	498.0	498.7	499.4
62.5°	458.1	462.1	466.0	468.4	469.4	470.2	471.1	472.1
65°	414.5	418.1	421.7	424.0	424.9	425.9	426.8	427.8
67.5°	369.9	374.2	378.6	381.4	382.5	383.8	385.0	386.3
70°	339.5	344.0	348.5	351.5	352.9	354.3	355.8	357.2
72.5°	311.2	316.1	320.9	323.9	325.0	326.0	327.0	328.1
75°	268.3	273.1	277.8	280.7	281.9	283.1	284.3	285.5
77.5°	225.4	230.6	235.8	238.9	239.9	240.8	241.8	242.7
80°	199.7	204.9	210.2	213.3	214.2	215.2	216.1	217.1
82.5°	175.4	180.5	185.4	188.9	190.6	192.3	194.0	195.7
85°	142.0	147.2	152.4	156.0	157.9	159.8	161.7	163.6
87.5°	115.9	121.4	126.9	130.6	132.3	134.0	135.6	137.3
90°	103.7	109.4	115.2	119.3	121.0	122.6	124.5	126.2
92.5°	144.4	136.1	132.5	131.8	129.9	130.9	132.1	133.3
95°	289.9	252.5	223.3	203.2	185.0	178.2	177.7	174.8
97.5°	382.5	357.7	329.1	299.7	284.0	270.0	263.4	261.5
100°	422.8	414.1	390.2	364.3	346.4	327.6	318.8	315.7
102.5°	434.0	447.3	438.2	421.6	402.3	389.4	379.6	377.7
105°	418.8	461.9	479.0	479.2	471.8	464.3	460.3	458.7
107.5°	382.1	437.9	474.3	491.9	498.0	499.4	499.0	498.3
110°	355.0	412.6	456.6	483.5	497.8	504.8	508.4	510.1



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CATALOG NUMBER: S125DIP-S1090D365U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	332.8	387.6	431.8	462.9	483.0	493.8	500.3	504.0
115°	304.4	352.1	394.7	428.2	451.4	466.3	475.5	480.6
117.5°	284.0	325.4	362.5	393.3	416.8	432.3	441.6	445.5
120°	272.5	310.1	345.0	372.3	394.5	409.3	418.4	422.0
122.5°	262.6	297.6	328.9	354.6	374.5	388.2	397.3	400.7
125°	248.6	281.0	309.1	331.8	348.6	361.3	368.7	372.6
127.5°	234.2	264.4	290.6	311.9	327.5	339.1	346.2	348.8
130°	225.6	253.6	278.8	299.2	314.4	324.8	331.6	334.5
132.5°	216.6	243.0	266.2	285.8	300.8	311.1	317.2	320.1
135°	203.7	226.1	247.2	265.2	278.8	289.1	295.4	298.3
137.5°	193.1	211.6	229.3	244.7	256.7	266.0	271.6	274.4
140°	186.8	202.6	218.1	231.6	243.0	251.2	256.4	258.6
142.5°	181.4	194.8	208.1	219.9	229.7	236.8	241.7	243.8
145°	175.2	185.0	194.9	203.5	211.1	216.9	220.9	223.0
147.5°	169.9	177.4	184.4	190.5	196.2	200.5	202.7	203.7
150°	167.2	173.3	178.6	183.8	188.2	191.8	193.1	193.7
152.5°	164.9	170.4	175.2	179.2	182.8	185.5	186.7	187.0
155°	161.5	166.0	169.9	173.0	175.8	177.8	178.6	178.9
157.5°	158.2	161.8	164.9	167.3	169.5	171.1	171.9	171.8
160°	156.0	158.8	161.5	163.5	165.5	166.8	167.4	167.2
162.5°	153.4	156.1	158.4	160.2	161.7	162.8	163.0	162.9
165°	150.0	152.0	153.7	155.1	156.2	156.8	156.8	156.8
167.5°	146.8	148.1	149.4	150.4	151.0	151.5	151.2	151.1
170°	145.0	145.8	146.7	147.3	147.8	148.1	148.1	147.8
172.5°	143.0	143.9	144.5	144.8	144.9	145.4	145.0	144.7
175°	140.9	140.9	141.4	141.4	141.4	141.6	141.1	140.9
177.5°	139.3	139.5	139.5	139.5	139.3	139.5	138.9	138.9
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9

(END OF REPORT)