

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: P331441-935

Luminaire Tested: **SA2XXDIP-C1005D725U935-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331441-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C1005D725U935-4F0-1E-UDD-D
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1005 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 725 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

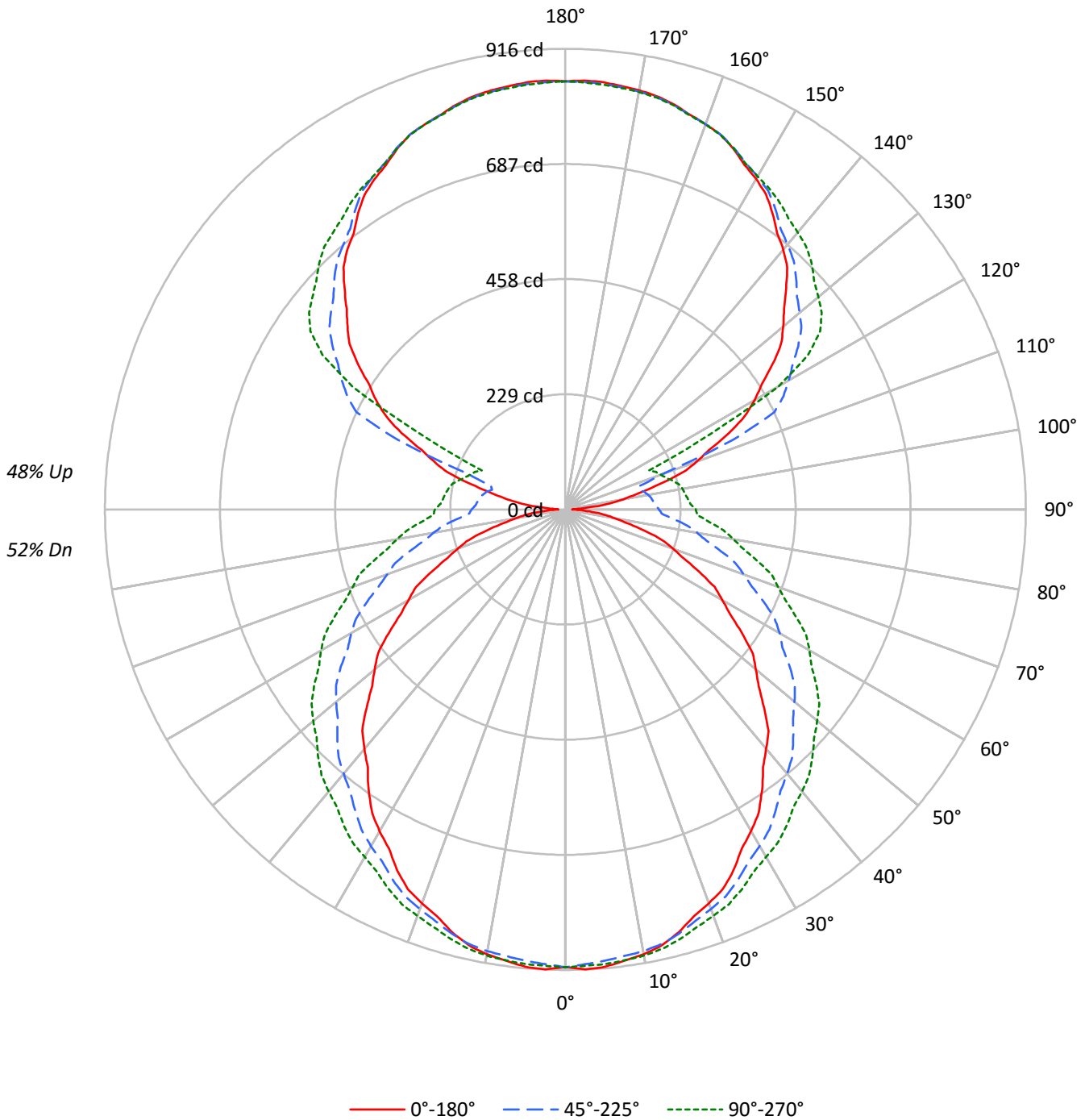
Lumens per Lamp: N/A
Luminaire Lumens: 5970.0 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: General Diffuse

Input Watts (W): 60.7
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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	97	92	87	83	89	85	81	77	72	69	66	60	57	56	49	47	46	40
2	87	79	72	67	80	73	67	62	62	57	53	51	48	45	42	39	37	33
3	79	69	61	55	73	64	57	51	54	49	44	45	41	37	37	34	31	27
4	72	61	52	46	66	56	49	43	48	42	37	40	35	32	32	29	26	23
5	66	54	45	39	61	50	42	37	42	36	32	35	31	27	29	25	23	19
6	61	48	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	17
7	56	43	35	29	52	40	33	28	34	28	24	29	24	21	24	20	17	15
8	52	39	31	26	48	37	29	24	31	26	21	26	22	18	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14699	14699	14699
5°	14772	14150	14097
10°	14679	13733	13578
15°	14477	13289	13032
20°	14222	12815	12506
25°	13968	12358	12028
30°	13612	11889	11549
35°	13253	11434	11211
40°	12874	11047	10874
45°	12515	10702	10584
50°	12128	10388	10300
55°	11724	10052	10011
60°	11226	9702	9705
65°	10711	9294	9342
70°	10136	8856	8949
75°	9394	8423	8587
80°	8224	7984	8220
85°	7107	7603	7937



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	1.4
10°-20°	247.4	4.1
20°-30°	374.9	6.3
30°-40°	456.6	7.6
40°-50°	491.2	8.2
50°-60°	477.0	8.0
60°-70°	416.5	7.0
70°-80°	320.7	5.4
80°-90°	217.3	3.6
90°-100°	176.6	3.0
100°-110°	212.4	3.6
110°-120°	349.8	5.9
120°-130°	499.3	8.4
130°-140°	505.3	8.5
140°-150°	457.0	7.7
150°-160°	365.1	6.1
160°-170°	235.3	3.9
170°-180°	81.0	1.4
0°-30°	708.5	11.9
0°-40°	1165.2	19.5
0°-60°	2133.4	35.7
0°-90°	3088.0	51.7
90°-120°	738.9	12.4
90°-150°	2200.6	36.9
90°-180°	2882.0	48.3
0°-180°	5970.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	913	909	901	909	908	87
15°	871	873	874	885	884	245
25°	792	801	813	828	833	364
35°	682	705	730	758	768	426
45°	560	596	641	681	695	432
55°	429	478	545	591	610	383
65°	293	358	435	488	507	291
75°	162	237	321	375	394	172
85°	48	129	214	267	288	51
90°	14	97	186	240	259	11
95°	51	95	176	227	244	57
105°	194	242	151	202	221	208
115°	359	387	459	226	184	353
125°	503	514	565	604	619	449
135°	621	631	650	682	693	480
145°	719	719	729	740	744	450
155°	791	787	793	796	792	365
165°	834	830	832	836	832	236
175°	853	849	850	854	848	81
180°	851	851	851	851	851	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4
2.5°	915.8	915.1	914.3	913.6	912.9	911.7	910.1	908.4	906.8	905.2	906.4
5°	913.1	912.2	911.4	910.4	909.6	908.3	906.5	904.7	903.0	901.2	903.0
7.5°	904.9	904.3	903.7	903.2	902.6	901.6	900.3	898.9	897.6	896.2	898.3
10°	898.6	898.0	897.4	896.8	896.2	895.5	894.7	893.7	892.9	892.0	894.3
12.5°	888.0	888.1	888.3	888.4	888.5	888.2	887.6	886.9	886.3	885.6	888.0
15°	870.9	871.5	872.0	872.6	873.2	873.5	873.5	873.5	873.5	873.5	876.2
17.5°	848.7	850.0	851.2	852.4	853.6	854.7	855.7	856.6	857.6	858.5	861.3
20°	834.0	835.4	836.9	838.4	839.8	841.1	842.3	843.4	844.6	845.8	849.0
22.5°	818.1	819.8	821.5	823.2	824.9	826.6	828.2	829.8	831.5	833.1	836.4
25°	791.7	793.8	795.8	797.9	800.0	802.3	804.9	807.5	810.2	812.8	816.3
27.5°	760.0	763.4	766.7	770.1	773.4	776.6	779.7	782.8	785.9	789.1	793.5
30°	738.9	742.7	746.6	750.4	754.1	758.0	761.8	765.6	769.4	773.3	777.9
32.5°	715.7	720.0	724.3	728.6	732.8	737.2	741.8	746.2	750.8	755.3	760.7
35°	682.2	687.2	692.2	697.2	702.1	707.4	713.0	718.5	724.1	729.7	736.2
37.5°	645.8	651.5	657.3	663.0	668.7	675.2	682.4	689.7	696.9	704.1	711.3
40°	621.5	627.9	634.4	640.8	647.3	654.4	662.4	670.3	678.2	686.1	693.8
42.5°	598.3	604.7	611.1	617.6	624.1	631.8	640.9	650.1	659.1	668.2	676.5
45°	559.5	567.4	575.3	583.2	591.2	600.2	610.5	620.8	631.0	641.3	650.4
47.5°	521.2	529.9	538.5	547.1	555.7	566.0	578.1	590.0	602.1	614.1	623.6
50°	494.8	503.9	513.0	522.1	531.2	542.3	555.5	568.7	581.9	595.1	605.1
52.5°	469.5	479.1	488.6	498.2	507.7	519.4	533.3	547.3	561.1	575.1	585.2
55°	428.9	439.4	450.0	460.5	471.1	484.0	499.2	514.4	529.7	544.9	555.5
57.5°	388.7	400.6	412.5	424.5	436.4	450.0	465.6	481.1	496.7	512.2	523.6
60°	360.2	372.8	385.5	398.0	410.7	425.3	442.0	458.7	475.4	492.1	503.3
62.5°	334.9	347.9	361.0	374.1	387.2	402.1	418.8	435.5	452.3	469.0	480.8
65°	292.9	307.3	321.7	336.0	350.4	366.3	383.6	400.8	418.1	435.4	447.5
67.5°	254.4	269.4	284.4	299.5	314.4	330.8	348.5	366.3	383.9	401.7	413.8
70°	227.0	242.2	257.4	272.7	287.9	304.6	322.9	341.0	359.2	377.4	389.9
72.5°	201.6	217.3	233.1	248.7	264.5	281.5	300.0	318.4	336.8	355.2	367.6
75°	162.3	178.7	195.1	211.5	228.0	245.6	264.3	283.1	301.9	320.6	333.2
77.5°	124.3	141.5	158.7	175.8	193.0	211.1	230.2	249.3	268.3	287.4	300.0
80°	98.9	116.8	134.7	152.7	170.5	189.0	208.0	227.1	246.2	265.2	277.5
82.5°	77.8	95.5	113.1	130.8	148.4	166.9	186.2	205.5	224.8	244.1	256.4
85°	47.5	65.7	83.9	102.0	120.2	138.7	157.5	176.2	195.0	213.8	226.1
87.5°	26.0	43.7	61.6	79.3	97.1	115.5	134.5	153.4	172.5	191.4	203.5
90°	13.8	32.3	50.8	69.3	87.8	107.0	126.9	146.8	166.6	186.5	198.9
92.5°	24.5	40.3	56.0	71.6	87.4	104.5	123.1	141.7	160.3	179.0	190.8
95°	50.6	59.8	69.1	78.4	87.6	101.6	120.1	138.6	157.2	175.7	187.6
97.5°	88.7	88.3	87.7	87.3	86.8	96.1	115.2	134.3	153.4	172.5	183.9
100°	118.2	110.4	102.5	94.5	86.6	92.0	110.8	129.6	148.4	167.0	179.0
102.5°	149.7	155.7	161.6	167.6	173.5	174.7	171.2	167.6	164.2	160.7	172.7
105°	193.8	206.5	219.0	231.7	244.3	239.5	217.4	195.3	173.1	151.0	162.8
107.5°	245.6	255.8	265.9	276.0	286.1	276.1	245.9	215.7	185.5	155.2	163.6
110°	278.1	286.9	295.6	304.4	313.1	304.9	279.7	254.5	229.3	204.1	199.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	309.6	317.1	324.6	332.1	339.6	345.3	349.1	353.0	356.9	360.8	320.2
115°	359.4	365.0	370.5	376.1	381.6	392.7	409.3	425.9	442.6	459.2	404.6
117.5°	402.6	407.3	412.0	416.7	421.5	431.0	445.6	460.1	474.7	489.2	482.6
120°	435.1	438.3	441.5	444.8	448.0	456.7	470.9	485.1	499.3	513.5	523.3
122.5°	462.7	465.3	468.0	470.5	473.2	481.4	495.1	508.8	522.5	536.2	545.2
125°	503.3	505.1	507.0	508.7	510.5	517.4	529.3	541.3	553.3	565.3	574.2
127.5°	541.4	543.1	544.8	546.5	548.1	553.7	563.3	572.7	582.3	591.8	600.5
130°	565.6	567.5	569.4	571.3	573.2	577.9	585.6	593.2	600.9	608.6	617.2
132.5°	590.2	591.8	593.3	595.0	596.5	600.4	606.7	612.9	619.1	625.4	633.5
135°	621.0	623.1	625.3	627.5	629.6	632.8	637.1	641.2	645.3	649.5	657.0
137.5°	653.3	654.8	656.3	657.7	659.2	661.3	664.0	666.7	669.3	672.0	678.8
140°	674.5	675.3	676.1	676.9	677.7	679.2	681.2	683.4	685.4	687.5	693.4
142.5°	692.2	692.9	693.6	694.3	695.0	696.3	698.1	700.0	701.8	703.6	708.5
145°	718.8	718.6	718.5	718.3	718.2	719.3	721.6	723.9	726.3	728.6	731.3
147.5°	743.0	742.5	742.0	741.5	741.0	741.8	744.2	746.4	748.7	751.1	752.0
150°	758.8	757.9	756.9	756.0	754.9	755.6	757.8	759.9	762.2	764.3	765.2
152.5°	772.1	771.0	770.0	768.9	767.8	768.4	770.4	772.5	774.6	776.6	777.5
155°	791.4	790.2	788.9	787.7	786.5	786.7	788.3	790.0	791.6	793.2	794.1
157.5°	806.6	805.6	804.5	803.5	802.5	802.5	803.7	804.8	805.9	807.1	808.0
160°	815.5	814.6	813.8	813.0	812.2	812.2	813.0	813.8	814.6	815.5	816.3
162.5°	823.4	822.5	821.7	820.9	820.0	820.0	820.7	821.4	822.2	822.9	823.8
165°	834.0	833.1	832.3	831.5	830.6	830.4	830.9	831.3	831.6	832.1	833.0
167.5°	841.8	841.0	840.2	839.4	838.5	838.3	838.7	839.0	839.5	839.8	840.8
170°	846.3	845.4	844.6	843.8	843.0	842.7	843.0	843.3	843.5	843.8	844.7
172.5°	849.2	848.3	847.6	846.7	845.9	845.7	845.9	846.2	846.4	846.7	847.7
175°	853.0	852.0	851.1	850.2	849.2	848.9	849.1	849.4	849.6	850.0	850.9
177.5°	853.7	852.9	852.1	851.4	850.6	850.2	850.3	850.5	850.6	850.7	851.4
180°	851.2	851.2	851.2	851.2	851.2	851.2	851.2	851.2	851.2	851.2	851.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4
2.5°	907.5	908.7	909.9	910.2	909.7	909.3	908.8	908.4
5°	904.7	906.5	908.3	909.0	908.7	908.4	908.1	907.8
7.5°	900.4	902.6	904.7	905.6	905.3	905.0	904.7	904.4
10°	896.6	899.1	901.4	902.4	902.1	901.8	901.6	901.2
12.5°	890.4	892.7	895.0	896.0	895.8	895.4	895.2	894.9
15°	878.8	881.4	884.1	885.3	884.9	884.7	884.3	884.1
17.5°	864.0	866.8	869.5	870.9	870.9	870.9	870.9	870.9
20°	852.2	855.5	858.7	860.3	860.3	860.3	860.3	860.3
22.5°	839.6	842.8	846.0	847.9	848.3	848.9	849.3	849.8
25°	819.8	823.4	826.9	829.1	830.0	830.9	831.7	832.6
27.5°	798.0	802.5	806.9	809.4	810.1	810.7	811.4	812.0
30°	782.6	787.3	792.0	794.8	795.7	796.5	797.5	798.3
32.5°	766.1	771.5	776.9	780.3	782.0	783.5	785.1	786.7
35°	742.6	749.1	755.5	759.7	761.8	763.9	765.9	767.9
37.5°	718.4	725.6	732.7	737.4	739.5	741.8	743.9	746.1
40°	701.4	709.0	716.6	721.8	724.4	727.0	729.7	732.4
42.5°	684.8	693.2	701.5	707.0	709.6	712.3	714.9	717.6
45°	659.4	668.6	677.6	683.6	686.6	689.5	692.4	695.3
47.5°	633.1	642.6	652.1	658.5	661.7	665.0	668.1	671.4
50°	615.0	625.0	635.0	641.6	644.8	648.0	651.3	654.4
52.5°	595.5	605.6	615.9	622.7	626.1	629.6	633.1	636.5
55°	566.1	576.6	587.2	594.3	598.1	602.0	605.8	609.6
57.5°	535.0	546.4	557.8	565.3	569.2	573.1	577.0	580.8
60°	514.4	525.6	536.7	544.4	548.5	552.6	556.7	560.8
62.5°	492.7	504.5	516.3	524.2	528.1	531.9	535.8	539.7
65°	459.5	471.5	483.5	491.5	495.2	499.0	502.9	506.7
67.5°	425.9	438.1	450.2	458.3	462.3	466.2	470.3	474.2
70°	402.6	415.2	427.8	435.8	439.4	442.9	446.4	450.0
72.5°	380.0	392.4	404.7	413.0	417.2	421.5	425.7	429.9
75°	345.9	358.4	371.1	379.3	383.1	386.9	390.7	394.5
77.5°	312.5	325.0	337.6	345.9	350.0	354.1	358.3	362.3
80°	289.8	302.2	314.5	322.7	326.8	330.9	335.0	339.1
82.5°	268.7	281.0	293.3	301.4	305.3	309.2	313.1	316.9
85°	238.4	250.7	263.0	271.2	275.3	279.5	283.5	287.7
87.5°	215.6	227.7	239.8	247.8	251.6	255.4	259.2	263.0
90°	211.3	223.8	236.2	244.3	248.1	251.8	255.6	259.4
92.5°	202.7	214.5	226.4	234.1	237.8	241.5	245.2	248.8
95°	199.4	211.2	223.1	230.7	234.0	237.5	240.8	244.2
97.5°	195.4	206.7	218.1	225.7	229.3	232.9	236.5	240.1
100°	191.0	202.9	214.8	222.6	226.0	229.5	233.1	236.5
102.5°	184.8	196.7	208.8	216.6	220.2	223.9	227.5	231.1
105°	174.6	186.3	198.1	205.9	209.7	213.4	217.2	221.0
107.5°	171.9	180.2	188.6	194.6	198.4	202.2	205.9	209.7
110°	195.5	191.2	186.9	186.7	190.4	194.2	197.9	201.7



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CATALOG NUMBER: SA2XXDIP-C1005D725U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	279.7	239.2	198.6	180.2	183.8	187.5	191.1	194.8
115°	350.0	295.5	240.9	210.3	203.6	197.0	190.4	183.7
117.5°	476.0	469.3	462.7	444.6	415.3	385.8	356.5	327.1
120°	533.2	543.0	552.8	550.2	534.9	519.7	504.5	489.2
122.5°	554.1	563.1	572.0	576.1	575.3	574.5	573.6	572.8
125°	583.1	591.9	600.8	606.7	609.8	612.9	615.9	619.0
127.5°	609.1	617.8	626.5	632.1	634.7	637.4	640.1	642.7
130°	625.7	634.2	642.7	648.2	650.3	652.6	654.8	656.9
132.5°	641.6	649.7	657.8	662.9	665.1	667.4	669.5	671.8
135°	664.5	672.1	679.6	684.4	686.5	688.5	690.6	692.7
137.5°	685.5	692.2	699.0	703.1	704.6	706.2	707.7	709.2
140°	699.4	705.3	711.2	714.7	715.7	716.9	717.9	719.0
142.5°	713.4	718.2	723.2	726.0	726.9	727.7	728.5	729.4
145°	734.1	736.8	739.5	741.2	742.0	742.8	743.6	744.3
147.5°	752.9	753.9	754.8	755.4	755.4	755.6	755.7	755.9
150°	765.9	766.8	767.6	767.7	767.0	766.3	765.6	764.9
152.5°	778.3	779.1	780.0	779.9	779.0	778.1	777.2	776.3
155°	795.0	795.7	796.6	796.4	795.3	794.3	793.2	792.0
157.5°	808.9	809.9	810.8	810.7	809.7	808.6	807.5	806.5
160°	817.1	817.9	818.7	818.6	817.7	816.7	815.8	814.9
162.5°	824.7	825.6	826.6	826.5	825.3	824.1	822.9	821.7
165°	834.0	835.0	835.9	835.9	835.0	834.0	833.0	832.1
167.5°	841.8	842.7	843.7	843.5	842.3	841.1	839.8	838.6
170°	845.7	846.6	847.7	847.5	846.3	845.0	843.8	842.6
172.5°	848.7	849.6	850.6	850.4	849.2	848.0	846.7	845.5
175°	851.9	852.8	853.8	853.6	852.2	850.8	849.5	848.1
177.5°	852.2	853.0	853.8	853.7	852.6	851.7	850.7	849.7
180°	851.2	851.2	851.2	851.2	851.2	851.2	851.2	851.2

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