

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: P331441-930

Luminaire Tested: **SA2XXDIP-C1005D725U930-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331441-930
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-C1005D725U930-4F0-1E-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

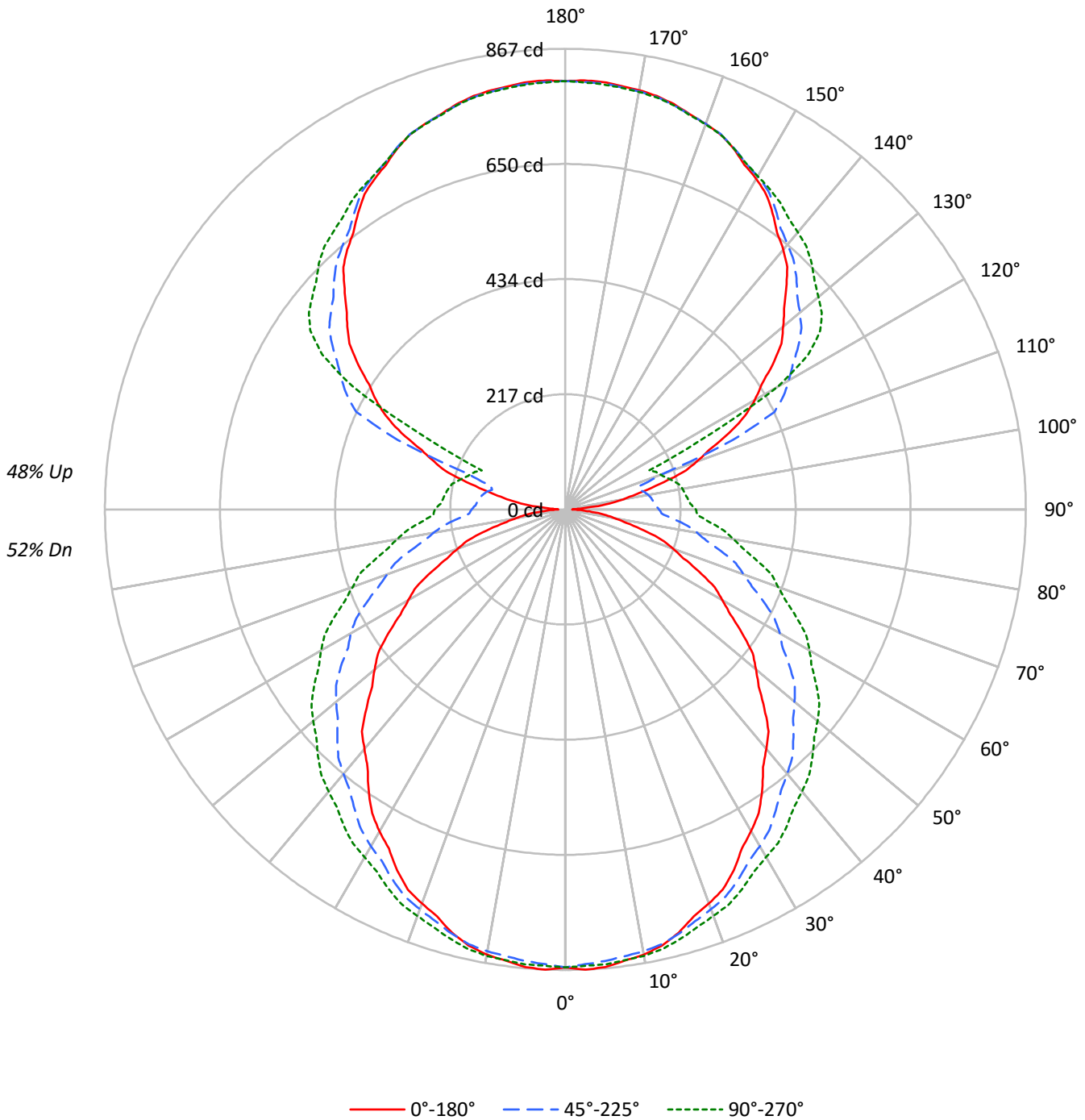
Lumens per Lamp: N/A
Luminaire Lumens: 5653.1 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: General Diffuse

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°	13919	13919	13919
5°	13988	13400	13350
10°	13899	13004	12858
15°	13709	12584	12339
20°	13467	12136	11842
25°	13227	11701	11390
30°	12890	11257	10936
35°	12550	10828	10617
40°	12191	10461	10297
45°	11850	10133	10022
50°	11485	9837	9754
55°	11101	9519	9479
60°	10631	9187	9189
65°	10145	8801	8846
70°	9596	8384	8474
75°	8897	7976	8132
80°	7792	7559	7784
85°	6733	7197	7515



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.4
10°-20°	234.3	4.1
20°-30°	355.0	6.3
30°-40°	432.4	7.6
40°-50°	465.2	8.2
50°-60°	451.7	8.0
60°-70°	394.4	7.0
70°-80°	303.7	5.4
80°-90°	205.8	3.6
90°-100°	167.3	3.0
100°-110°	201.1	3.6
110°-120°	331.3	5.9
120°-130°	472.8	8.4
130°-140°	478.5	8.5
140°-150°	432.8	7.7
150°-160°	345.7	6.1
160°-170°	222.8	3.9
170°-180°	76.7	1.4
0°-30°	670.9	11.9
0°-40°	1103.3	19.5
0°-60°	2020.2	35.7
0°-90°	2924.0	51.7
90°-120°	699.6	12.4
90°-150°	2083.8	36.9
90°-180°	2729.0	48.3
0°-180°	5653.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	865	861	853	860	860	82
15°	825	827	827	838	837	232
25°	750	759	770	784	788	345
35°	646	667	691	717	727	404
45°	530	564	607	644	658	409
55°	406	452	516	559	577	363
65°	277	339	412	462	480	275
75°	154	224	304	355	374	163
85°	45	123	202	253	272	48
90°	13	92	177	227	246	10
95°	48	90	166	215	231	54
105°	184	229	143	191	209	197
115°	340	367	435	214	174	335
125°	477	487	535	572	586	425
135°	588	598	615	646	656	454
145°	681	681	690	701	705	426
155°	749	745	751	754	750	345
165°	790	786	788	792	788	223
175°	808	804	805	808	803	77
180°	806	806	806	806	806	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	862.1	862.1	862.1	862.1	862.1	862.1	862.1	862.1	862.1	862.1	862.1
2.5°	867.2	866.5	865.8	865.1	864.5	863.3	861.8	860.2	858.7	857.1	858.3
5°	864.6	863.8	863.0	862.1	861.3	860.1	858.4	856.7	855.1	853.4	855.1
7.5°	856.9	856.3	855.7	855.2	854.7	853.8	852.5	851.2	849.9	848.6	850.6
10°	850.9	850.4	849.8	849.2	848.6	848.0	847.2	846.3	845.5	844.7	846.9
12.5°	840.9	841.0	841.1	841.2	841.3	841.1	840.5	839.8	839.3	838.6	840.9
15°	824.7	825.2	825.7	826.3	826.9	827.1	827.1	827.1	827.1	827.1	829.6
17.5°	803.6	804.9	806.0	807.1	808.3	809.3	810.2	811.1	812.0	812.9	815.5
20°	789.7	791.1	792.5	793.9	795.2	796.5	797.6	798.7	799.8	801.0	804.0
22.5°	774.7	776.2	777.9	779.5	781.1	782.7	784.2	785.8	787.3	788.9	792.0
25°	749.7	751.6	753.6	755.5	757.5	759.7	762.1	764.7	767.2	769.6	773.0
27.5°	719.7	722.8	726.0	729.2	732.4	735.4	738.3	741.3	744.2	747.2	751.4
30°	699.7	703.3	706.9	710.5	714.1	717.8	721.4	725.0	728.6	732.2	736.6
32.5°	677.7	681.8	685.8	689.9	693.9	698.1	702.4	706.6	710.9	715.2	720.3
35°	646.0	650.7	655.4	660.1	664.9	669.8	675.1	680.4	685.7	691.0	697.1
37.5°	611.5	616.9	622.4	627.8	633.2	639.4	646.2	653.1	659.9	666.8	673.5
40°	588.5	594.6	600.7	606.8	612.9	619.7	627.2	634.7	642.2	649.7	657.0
42.5°	566.6	572.6	578.7	584.8	590.9	598.3	606.9	615.6	624.1	632.8	640.6
45°	529.8	537.3	544.8	552.3	559.8	568.3	578.1	587.8	597.5	607.2	615.9
47.5°	493.6	501.7	509.9	518.0	526.2	536.0	547.4	558.7	570.1	581.5	590.5
50°	468.6	477.2	485.8	494.4	503.0	513.6	526.0	538.5	551.0	563.5	573.0
52.5°	444.6	453.6	462.7	471.7	480.8	491.9	505.0	518.2	531.3	544.5	554.2
55°	406.1	416.0	426.1	436.1	446.1	458.3	472.7	487.1	501.6	516.0	526.0
57.5°	368.1	379.4	390.6	401.9	413.2	426.2	440.9	455.6	470.3	485.0	495.8
60°	341.1	353.0	365.0	376.9	388.9	402.8	418.6	434.4	450.2	466.0	476.6
62.5°	317.2	329.5	341.9	354.2	366.6	380.7	396.6	412.4	428.3	444.1	455.3
65°	277.4	291.0	304.6	318.2	331.8	346.8	363.2	379.5	395.9	412.3	423.7
67.5°	240.9	255.1	269.3	283.6	297.7	313.2	330.0	346.8	363.5	380.3	391.8
70°	214.9	229.3	243.8	258.2	272.6	288.5	305.7	322.9	340.1	357.3	369.2
72.5°	190.9	205.8	220.7	235.5	250.5	266.6	284.1	301.5	318.9	336.4	348.1
75°	153.7	169.3	184.7	200.3	215.9	232.5	250.3	268.1	285.8	303.6	315.5
77.5°	117.7	134.0	150.3	166.5	182.8	199.9	218.0	236.0	254.0	272.1	284.1
80°	93.7	110.6	127.6	144.6	161.4	179.0	197.0	215.1	233.1	251.1	262.8
82.5°	73.7	90.4	107.1	123.8	140.6	158.1	176.3	194.6	212.9	231.1	242.8
85°	45.0	62.2	79.4	96.6	113.8	131.3	149.1	166.9	184.7	202.4	214.1
87.5°	24.6	41.4	58.3	75.1	92.0	109.3	127.3	145.3	163.3	181.2	192.7
90°	13.0	30.6	48.1	65.6	83.2	101.3	120.2	139.0	157.8	176.6	188.3
92.5°	23.2	38.2	53.0	67.8	82.8	99.0	116.6	134.2	151.8	169.5	180.7
95°	47.9	56.7	65.5	74.2	83.0	96.2	113.7	131.3	148.9	166.4	177.7
97.5°	84.0	83.6	83.1	82.7	82.2	91.0	109.1	127.2	145.3	163.4	174.1
100°	111.9	104.5	97.0	89.5	82.0	87.2	104.9	122.7	140.5	158.2	169.5
102.5°	141.8	147.4	153.0	158.7	164.3	165.4	162.1	158.7	155.5	152.1	163.5
105°	183.5	195.5	207.4	219.4	231.3	226.8	205.9	184.9	164.0	143.0	154.2
107.5°	232.6	242.2	251.8	261.4	270.9	261.5	232.8	204.2	175.6	147.0	154.9
110°	263.3	271.7	279.9	288.2	296.4	288.7	264.8	241.0	217.1	193.3	189.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	293.2	300.3	307.4	314.5	321.6	326.9	330.6	334.3	337.9	341.6	303.2
115°	340.3	345.6	350.8	356.1	361.3	371.9	387.6	403.3	419.1	434.8	383.1
117.5°	381.2	385.6	390.1	394.6	399.1	408.1	421.9	435.7	449.5	463.3	457.0
120°	412.0	415.1	418.1	421.2	424.2	432.4	445.9	459.3	472.8	486.2	495.5
122.5°	438.1	440.6	443.1	445.6	448.1	455.8	468.8	481.8	494.8	507.8	516.2
125°	476.6	478.3	480.0	481.7	483.4	489.9	501.2	512.6	523.9	535.3	543.7
127.5°	512.7	514.3	515.8	517.5	519.0	524.3	533.4	542.3	551.4	560.4	568.6
130°	535.6	537.4	539.2	541.0	542.7	547.2	554.5	561.7	569.0	576.3	584.4
132.5°	558.9	560.4	561.8	563.4	564.8	568.5	574.5	580.4	586.3	592.2	599.9
135°	588.0	590.0	592.1	594.2	596.2	599.2	603.2	607.2	611.1	615.1	622.2
137.5°	618.6	620.0	621.4	622.8	624.2	626.2	628.8	631.3	633.8	636.3	642.8
140°	638.7	639.4	640.3	641.0	641.7	643.1	645.1	647.1	649.1	651.0	656.6
142.5°	655.5	656.2	656.8	657.5	658.1	659.3	661.0	662.8	664.6	666.3	670.9
145°	680.6	680.4	680.4	680.2	680.1	681.1	683.3	685.5	687.7	689.9	692.5
147.5°	703.6	703.1	702.6	702.1	701.6	702.5	704.7	706.8	709.0	711.2	712.1
150°	718.5	717.6	716.7	715.8	714.9	715.5	717.5	719.6	721.7	723.7	724.6
152.5°	731.1	730.1	729.1	728.1	727.1	727.6	729.5	731.5	733.4	735.4	736.2
155°	749.4	748.3	747.1	745.9	744.8	744.9	746.5	748.0	749.6	751.1	752.0
157.5°	763.8	762.8	761.8	760.8	759.9	759.9	761.0	762.1	763.1	764.3	765.2
160°	772.2	771.4	770.6	769.8	769.1	769.1	769.8	770.6	771.4	772.2	773.0
162.5°	779.7	778.9	778.1	777.3	776.5	776.5	777.1	777.8	778.5	779.2	780.1
165°	789.7	788.9	788.1	787.3	786.5	786.4	786.8	787.2	787.5	787.9	788.8
167.5°	797.1	796.4	795.6	794.8	794.0	793.8	794.2	794.5	794.9	795.2	796.1
170°	801.4	800.5	799.8	799.0	798.3	797.9	798.3	798.5	798.7	799.0	799.9
172.5°	804.1	803.3	802.6	801.8	801.0	800.8	801.0	801.3	801.5	801.8	802.7
175°	807.7	806.8	805.9	805.0	804.1	803.8	804.0	804.3	804.5	804.9	805.8
177.5°	808.4	807.6	806.9	806.2	805.4	805.1	805.2	805.4	805.4	805.5	806.2
180°	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	862.1	862.1	862.1	862.1	862.1	862.1	862.1	862.1
2.5°	859.3	860.5	861.6	861.9	861.4	861.0	860.5	860.1
5°	856.7	858.4	860.1	860.7	860.5	860.2	859.9	859.7
7.5°	852.6	854.7	856.6	857.5	857.2	857.0	856.6	856.4
10°	849.1	851.3	853.5	854.5	854.2	853.9	853.7	853.4
12.5°	843.1	845.3	847.5	848.5	848.2	847.9	847.7	847.4
15°	832.2	834.6	837.1	838.3	838.0	837.7	837.4	837.1
17.5°	818.2	820.8	823.4	824.7	824.7	824.7	824.7	824.7
20°	807.0	810.1	813.1	814.6	814.6	814.6	814.6	814.6
22.5°	795.0	798.1	801.1	802.9	803.3	803.8	804.2	804.7
25°	776.3	779.7	783.0	785.1	785.9	786.8	787.6	788.4
27.5°	755.6	759.9	764.1	766.5	767.1	767.7	768.3	768.9
30°	741.1	745.5	750.0	752.6	753.4	754.2	755.1	755.9
32.5°	725.5	730.5	735.6	738.9	740.5	741.9	743.5	744.9
35°	703.2	709.3	715.4	719.4	721.4	723.3	725.3	727.2
37.5°	680.3	687.1	693.8	698.2	700.3	702.4	704.4	706.5
40°	664.1	671.4	678.6	683.5	686.0	688.4	691.0	693.5
42.5°	648.5	656.4	664.3	669.4	672.0	674.5	676.9	679.5
45°	624.4	633.1	641.6	647.3	650.1	652.9	655.7	658.4
47.5°	599.5	608.5	617.5	623.5	626.6	629.7	632.7	635.8
50°	582.4	591.8	601.3	607.6	610.6	613.6	616.7	619.7
52.5°	563.9	573.5	583.2	589.6	592.9	596.2	599.5	602.8
55°	536.1	546.0	556.0	562.8	566.4	570.1	573.6	577.2
57.5°	506.6	517.4	528.2	535.3	539.0	542.7	546.3	550.0
60°	487.1	497.7	508.3	515.5	519.3	523.3	527.2	531.0
62.5°	466.5	477.7	488.9	496.4	500.0	503.7	507.4	511.0
65°	435.1	446.5	457.9	465.4	469.0	472.5	476.2	479.8
67.5°	403.3	414.8	426.3	434.0	437.7	441.5	445.3	449.1
70°	381.2	393.1	405.1	412.7	416.0	419.4	422.7	426.1
72.5°	359.8	371.5	383.2	391.1	395.1	399.1	403.1	407.1
75°	327.5	339.4	351.4	359.1	362.7	366.4	370.0	373.6
77.5°	295.9	307.8	319.7	327.6	331.4	335.3	339.2	343.1
80°	274.4	286.2	297.8	305.6	309.5	313.3	317.2	321.1
82.5°	254.5	266.1	277.8	285.4	289.1	292.8	296.4	300.1
85°	225.8	237.4	249.1	256.8	260.7	264.6	268.5	272.4
87.5°	204.2	215.6	227.1	234.6	238.2	241.8	245.4	249.1
90°	200.1	211.9	223.6	231.3	234.9	238.5	242.1	245.6
92.5°	191.9	203.1	214.3	221.7	225.2	228.7	232.2	235.6
95°	188.8	200.0	211.2	218.4	221.6	224.9	228.0	231.2
97.5°	185.0	195.8	206.5	213.7	217.1	220.5	224.0	227.4
100°	180.8	192.1	203.4	210.8	214.0	217.4	220.7	224.0
102.5°	175.0	186.3	197.7	205.1	208.6	212.0	215.4	218.8
105°	165.3	176.4	187.6	194.9	198.5	202.1	205.7	209.3
107.5°	162.7	170.6	178.6	184.3	187.8	191.4	194.9	198.5
110°	185.2	181.1	177.0	176.8	180.3	183.8	187.4	191.0



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CATALOG NUMBER: SA2XXDIP-C1005D725U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	264.9	226.5	188.1	170.6	174.1	177.6	181.0	184.5
115°	331.4	279.8	228.1	199.1	192.8	186.5	180.3	174.0
117.5°	450.7	444.4	438.1	421.0	393.2	365.3	337.5	309.7
120°	504.9	514.2	523.5	521.0	506.5	492.1	477.7	463.3
122.5°	524.7	533.2	541.7	545.5	544.8	544.0	543.2	542.4
125°	552.1	560.5	568.9	574.5	577.5	580.3	583.2	586.1
127.5°	576.7	585.0	593.2	598.6	601.0	603.6	606.1	608.6
130°	592.5	600.5	608.6	613.8	615.8	617.9	620.0	622.1
132.5°	607.6	615.2	622.9	627.7	629.8	631.9	634.0	636.1
135°	629.2	636.4	643.5	648.1	650.0	652.0	654.0	655.9
137.5°	649.1	655.5	661.9	665.8	667.2	668.7	670.2	671.6
140°	662.3	667.9	673.4	676.8	677.8	678.8	679.8	680.9
142.5°	675.6	680.1	684.8	687.5	688.3	689.1	689.8	690.6
145°	695.1	697.7	700.3	701.9	702.6	703.4	704.1	704.8
147.5°	713.0	713.9	714.8	715.3	715.3	715.5	715.6	715.8
150°	725.3	726.1	726.8	726.9	726.3	725.6	725.0	724.3
152.5°	736.9	737.8	738.6	738.5	737.7	736.8	736.0	735.1
155°	752.8	753.5	754.3	754.2	753.1	752.1	751.1	750.0
157.5°	766.0	766.9	767.8	767.7	766.7	765.6	764.7	763.7
160°	773.7	774.5	775.3	775.2	774.3	773.4	772.5	771.6
162.5°	780.9	781.8	782.7	782.6	781.5	780.3	779.3	778.1
165°	789.7	790.7	791.6	791.6	790.7	789.7	788.8	787.9
167.5°	797.1	798.0	798.9	798.7	797.6	796.5	795.2	794.1
170°	800.8	801.7	802.7	802.5	801.4	800.1	799.0	797.9
172.5°	803.6	804.5	805.4	805.3	804.1	803.0	801.8	800.6
175°	806.7	807.6	808.5	808.3	807.0	805.7	804.4	803.1
177.5°	807.0	807.7	808.5	808.4	807.4	806.5	805.5	804.6
180°	806.0	806.0	806.0	806.0	806.0	806.0	806.0	806.0

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