

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P136247

Luminaire Tested: **LD6A10D010TE ERW6A10940 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136247
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23359-R2)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A10D010TE ERW6A10940 6LW111LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 4000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1156.7 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.1
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

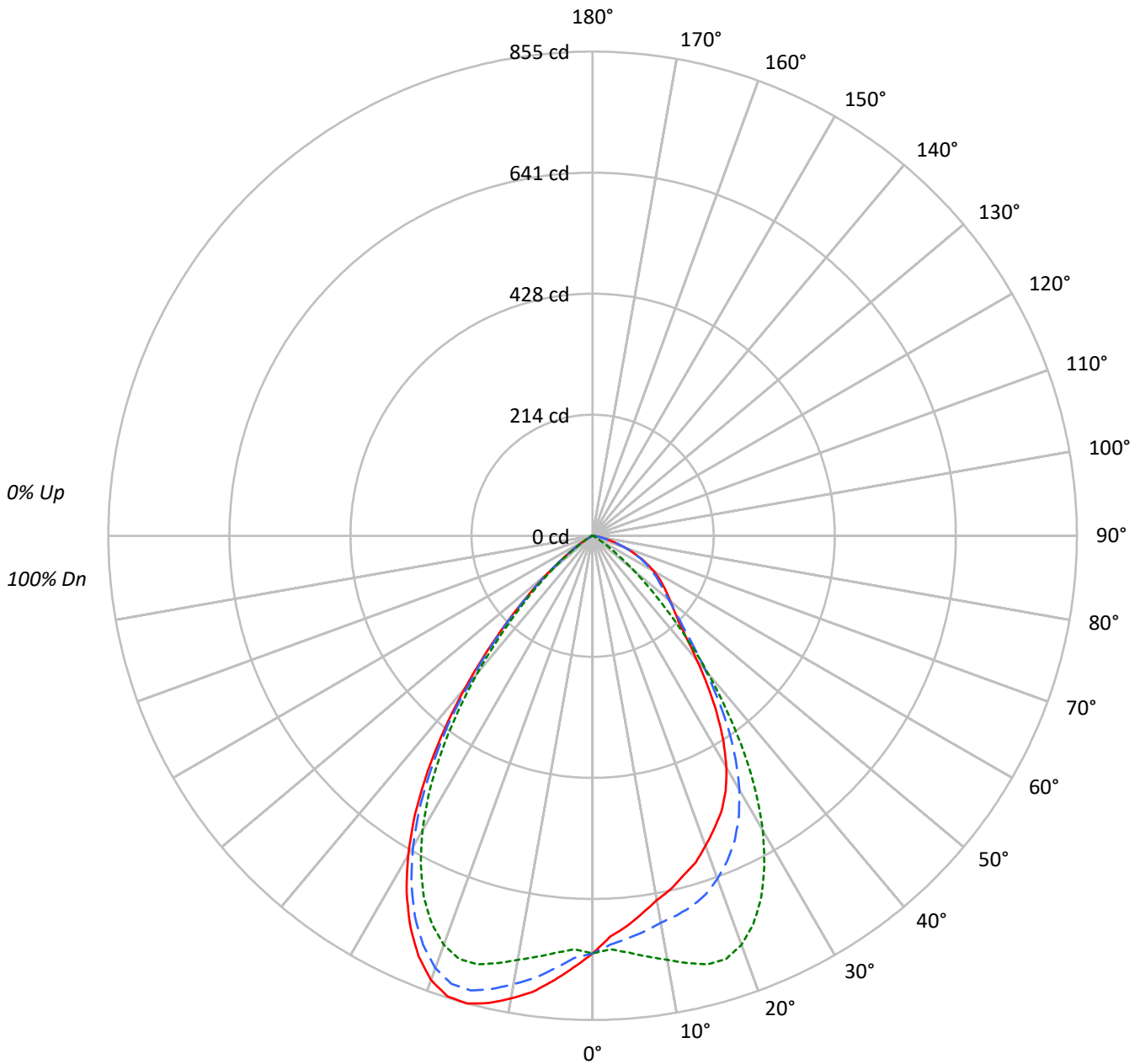
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82																			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	71	68	66																			
5	86	76	69	64	84	75	69	64	73	68	63	72	67	63	70	66	62	60																			
6	81	70	63	58	79	70	63	58	68	62	57	66	61	57	65	60	57	55																			
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	60	56	52	50																			
8	72	60	53	49	70	60	53	48	59	53	48	58	52	48	56	51	48	46																			
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43																			
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	48108	48108	48108
5°	45326	48397	51632
10°	43286	50381	54959
15°	41917	52919	57755
20°	40455	53362	57937
25°	38685	50713	54802
30°	35587	45253	49042
35°	30416	37035	40435
40°	24323	26844	29714
45°	19818	17004	19062
50°	18127	9358	10617
55°	17232	3845	4493
60°	16219	1396	1396
65°	14480	772	633
70°	11617	629	477
75°	7688	429	429
80°	4020	301	301
85°	1871	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	6.2
10°-20°	213.3	18.4
20°-30°	306.9	26.5
30°-40°	281.9	24.4
40°-50°	161.9	14.0
50°-60°	71.5	6.2
60°-70°	35.1	3.0
70°-80°	13.5	1.2
80°-90°	1.5	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	591.3	51.1
0°-40°	873.2	75.5
0°-60°	1106.5	95.7
0°-90°	1156.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1156.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	737	737	737	737	737	
5°	692	714	739	767	788	65
15°	621	677	784	831	855	175
25°	537	593	704	742	761	245
35°	382	418	465	491	508	237
45°	215	224	184	202	207	171
55°	152	144	34	37	40	135
65°	94	90	5	3	4	92
75°	30	32	2	2	2	34
85°	2	2	0	0	0	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4
2.5°	708.6	712.7	708.6	714.4	717.6	719.3	717.6	713.6	719.3	722.6	721.7
5°	692.1	695.4	692.1	697.9	702.0	706.1	704.5	702.0	708.6	713.6	714.4
7.5°	672.3	676.5	674.0	679.8	684.7	689.7	689.7	688.9	697.0	704.5	707.0
10°	653.4	656.7	655.1	660.9	666.7	672.3	674.0	674.8	683.9	693.7	699.5
12.5°	638.7	640.3	638.7	645.2	651.0	657.6	660.9	662.5	674.0	686.4	693.7
15°	620.6	624.6	623.0	629.6	636.2	643.6	647.6	651.0	663.3	677.3	688.0
17.5°	604.9	606.5	604.9	612.3	618.1	626.3	631.2	635.3	648.5	664.2	675.6
20°	582.7	586.0	585.1	591.7	598.3	605.7	610.7	614.8	628.7	644.4	657.6
22.5°	560.4	563.7	563.7	570.4	575.2	583.5	587.6	591.7	604.9	621.4	632.9
25°	537.4	539.9	539.0	544.8	550.6	558.8	562.1	566.2	578.5	593.4	604.0
27.5°	508.6	510.2	511.9	516.8	521.0	528.3	530.8	534.9	544.8	558.8	568.7
30°	472.4	474.1	476.5	480.7	483.9	491.3	493.0	496.3	506.1	517.7	526.7
32.5°	429.6	430.5	434.5	437.8	441.9	446.9	451.0	451.8	459.2	470.8	477.4
35°	381.9	382.7	386.8	389.2	393.4	398.3	401.6	402.5	409.1	418.1	422.2
37.5°	332.5	337.5	336.6	339.1	343.1	347.3	350.6	350.6	355.5	363.0	364.5
40°	285.6	288.1	290.5	292.2	295.4	298.7	301.2	301.2	304.5	309.5	309.5
42.5°	245.3	249.3	249.3	251.0	253.5	256.8	258.4	257.6	259.2	261.7	260.1
45°	214.8	216.5	217.3	219.8	220.6	223.8	224.6	223.0	223.8	223.8	218.9
47.5°	195.1	195.1	195.1	196.7	197.6	199.9	199.9	197.6	196.7	195.9	189.3
50°	178.6	178.6	179.4	181.0	181.9	182.7	182.7	179.4	178.6	175.3	166.2
52.5°	164.6	165.4	165.4	167.1	167.9	168.7	167.9	164.6	162.1	158.8	148.2
55°	151.5	152.3	153.0	154.7	154.7	154.7	153.9	150.6	148.2	144.0	133.3
57.5°	138.3	139.1	139.1	140.7	141.6	141.6	140.7	137.4	134.9	131.6	120.2
60°	124.3	124.3	125.1	126.8	126.8	127.6	126.8	124.3	121.8	117.7	107.8
62.5°	108.6	109.4	110.3	111.9	112.7	112.7	112.7	110.3	108.6	105.4	95.5
65°	93.8	93.8	94.6	96.3	96.3	98.8	97.1	95.5	93.8	90.5	82.3
67.5°	76.6	77.4	77.4	79.0	79.9	80.7	80.7	79.0	78.2	75.7	68.3
70°	60.9	60.9	61.7	62.5	63.3	64.2	64.2	63.3	62.5	60.0	54.3
72.5°	44.4	45.3	45.3	46.1	47.7	48.6	48.6	48.6	46.9	45.3	41.1
75°	30.5	31.3	31.3	32.1	33.0	33.8	33.8	33.8	33.0	32.1	28.8
77.5°	18.9	18.9	19.7	19.7	20.6	21.4	22.2	22.2	21.4	20.6	18.9
80°	10.7	10.7	11.6	11.6	11.6	12.3	13.1	13.1	13.1	12.3	10.7
82.5°	5.8	5.8	5.8	5.8	5.8	6.6	6.6	6.6	6.6	6.6	5.8
85°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4
2.5°	721.7	727.5	731.6	725.0	730.8	736.6	743.1	730.8	742.3	735.8	738.3
5°	717.6	724.2	730.0	725.9	733.3	740.6	749.7	739.0	752.2	747.3	751.4
7.5°	711.9	720.9	729.2	727.5	737.4	747.3	758.8	749.7	763.7	761.3	766.2
10°	707.0	719.3	730.0	730.0	743.1	754.7	767.0	760.5	776.9	774.4	781.0
12.5°	703.6	719.3	733.3	735.8	751.4	764.5	779.4	772.8	790.9	788.4	795.8
15°	700.3	718.4	735.0	739.8	757.2	772.8	788.4	783.5	802.4	799.9	807.4
17.5°	689.7	711.1	729.2	735.8	754.7	771.1	787.6	783.5	802.4	799.9	807.4
20°	671.5	692.9	712.7	720.1	739.0	756.3	771.9	768.6	787.6	785.2	791.7
22.5°	648.5	669.0	688.0	695.4	713.6	729.2	744.8	741.5	759.6	755.5	762.9
25°	616.4	637.8	655.9	661.7	678.1	693.7	707.8	704.5	721.7	716.8	724.2
27.5°	583.5	599.1	614.0	618.9	633.7	646.8	660.0	656.7	673.2	667.5	674.8
30°	539.0	551.4	564.6	567.0	581.0	591.7	603.2	600.7	614.8	609.8	616.4
32.5°	487.2	497.9	506.9	507.7	519.3	528.3	538.2	536.6	549.0	544.8	549.8
35°	430.5	437.0	442.8	441.9	451.0	457.5	466.6	465.0	476.5	472.4	477.4
37.5°	370.3	373.6	375.3	372.0	378.6	383.5	390.1	389.2	399.1	395.8	400.8
40°	311.9	311.9	309.5	303.7	307.8	310.3	315.2	315.2	322.6	319.3	323.4
42.5°	258.4	255.1	249.3	241.2	242.0	245.3	245.3	245.3	251.0	247.7	255.1
45°	214.8	207.4	198.4	187.6	184.3	186.0	184.3	184.3	188.5	186.0	191.8
47.5°	181.0	172.0	156.3	143.2	137.4	136.6	134.1	134.1	136.6	136.6	139.1
50°	155.5	142.4	123.5	107.8	99.6	97.1	93.8	92.2	94.6	93.8	95.5
52.5°	134.9	118.5	96.3	78.2	70.0	64.2	61.7	58.5	59.2	59.2	60.0
55°	117.7	98.8	74.9	56.0	46.9	40.3	37.0	33.8	33.8	33.0	33.8
57.5°	104.6	84.7	60.9	42.0	32.1	25.5	22.2	18.9	18.1	18.1	18.1
60°	93.0	74.1	50.2	33.0	23.0	16.4	13.1	10.7	9.9	9.1	9.1
62.5°	81.5	64.2	42.8	27.2	17.3	12.3	9.1	6.6	5.8	5.0	5.0
65°	70.0	55.2	37.0	23.0	14.8	9.9	6.6	5.0	4.1	3.3	3.3
67.5°	57.7	45.3	31.3	18.9	12.3	8.3	5.8	4.1	3.3	2.5	2.5
70°	46.1	36.2	24.7	15.6	9.9	6.6	4.1	3.3	2.5	2.5	2.5
72.5°	34.6	27.2	18.9	11.6	7.4	5.0	3.3	2.5	1.7	1.7	1.7
75°	24.7	19.7	13.1	8.3	5.0	3.3	2.5	1.7	1.7	1.7	1.7
77.5°	15.6	12.3	8.3	5.0	3.3	1.7	1.7	0.8	0.8	0.8	0.8
80°	9.1	7.4	5.0	3.3	1.7	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	5.0	3.3	2.5	1.7	0.8	0.8	0.8	0.0	0.0	0.0	0.0
85°	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4
2.5°	744.8	743.1	748.9	751.4	749.7	746.4	757.2	759.6	752.2	755.5	755.5
5°	759.6	759.6	767.0	770.3	770.3	767.0	779.4	783.5	776.1	779.4	780.2
7.5°	776.1	776.1	785.2	789.2	790.0	787.6	799.9	803.2	798.3	801.6	802.4
10°	790.9	790.9	801.6	805.7	806.6	804.1	816.4	820.5	814.7	818.0	818.9
12.5°	806.6	807.4	818.0	822.2	822.2	819.7	832.1	836.1	829.6	833.6	832.8
15°	818.0	818.9	829.6	833.6	834.5	831.2	842.7	847.7	841.1	843.6	843.6
17.5°	817.2	818.0	827.9	832.1	832.1	829.6	839.4	845.2	838.6	841.1	840.2
20°	800.8	801.6	812.2	815.6	815.6	812.2	821.3	827.1	820.5	822.2	821.3
22.5°	771.1	771.9	781.9	785.2	785.9	781.9	790.9	797.5	790.0	790.9	790.0
25°	732.5	732.5	743.1	743.1	747.3	742.3	748.9	758.0	750.6	750.6	748.1
27.5°	682.3	682.3	692.9	692.9	697.9	692.9	703.6	707.8	701.2	700.3	700.3
30°	623.8	623.8	633.7	633.7	637.8	633.7	644.4	648.5	642.0	641.1	642.0
32.5°	557.1	557.1	567.0	566.2	571.2	567.9	577.7	581.0	576.0	573.7	575.2
35°	483.9	488.0	493.8	493.0	497.9	491.3	503.7	506.1	502.1	502.9	500.4
37.5°	406.6	410.6	414.8	414.8	418.9	417.2	424.7	427.1	423.8	424.7	422.2
40°	329.2	333.3	336.6	336.6	340.7	335.8	345.6	348.1	344.8	341.5	343.1
42.5°	255.9	260.1	263.4	262.5	266.7	265.9	271.5	273.2	270.7	269.9	268.3
45°	192.6	193.4	199.2	201.6	201.6	201.6	205.7	206.6	204.1	204.1	203.2
47.5°	139.1	140.7	144.9	146.5	147.3	146.5	148.2	151.5	149.0	149.0	149.8
50°	96.3	97.1	100.4	102.1	102.1	102.1	102.9	105.4	103.7	103.7	102.1
52.5°	61.7	61.7	64.2	65.0	65.0	65.0	65.8	67.5	65.8	66.6	67.5
55°	34.6	34.6	36.2	37.0	37.0	37.0	37.8	38.6	37.8	38.6	38.6
57.5°	18.1	18.1	18.9	18.9	19.7	19.7	19.7	20.6	20.6	20.6	20.6
60°	9.1	9.1	9.1	9.9	9.9	9.9	9.9	10.7	10.7	10.7	10.7
62.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.8	5.8	5.8	5.8
65°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
67.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.3	3.3
70°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.5°	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	1.7	1.7
75°	0.8	1.7	1.7	0.8	0.8	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P136247

CATALOG NUMBER: LD6A10D010TE ERW6A10940 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	737.4	737.4	737.4	737.4
2.5°	748.9	749.7	763.7	762.9
5°	773.6	774.4	788.4	788.4
7.5°	795.8	796.6	811.4	812.2
10°	812.2	813.9	827.9	829.6
12.5°	827.9	827.9	841.9	845.2
15°	837.8	837.8	851.0	855.1
17.5°	834.5	834.5	847.7	852.6
20°	816.4	815.6	827.9	834.5
22.5°	785.2	785.9	795.8	803.2
25°	745.6	743.9	754.7	761.3
27.5°	696.2	697.0	703.6	711.1
30°	637.0	638.7	643.6	651.0
32.5°	570.4	572.8	576.0	583.5
35°	497.1	499.6	501.2	507.7
37.5°	418.1	421.4	422.2	428.8
40°	339.9	343.1	343.1	348.9
42.5°	266.7	269.2	268.3	273.2
45°	201.6	203.2	202.4	206.6
47.5°	147.3	149.0	147.3	150.6
50°	102.1	103.7	102.1	104.6
52.5°	65.8	66.6	65.0	67.5
55°	37.8	38.6	37.8	39.5
57.5°	21.4	20.6	19.7	21.4
60°	10.7	10.7	10.7	10.7
62.5°	5.8	5.8	5.8	5.8
65°	3.3	3.3	3.3	4.1
67.5°	3.3	3.3	3.3	3.3
70°	2.5	2.5	2.5	2.5
72.5°	1.7	1.7	1.7	1.7
75°	1.7	1.7	1.7	1.7
77.5°	0.8	0.8	0.8	0.8
80°	0.0	0.0	0.0	0.8
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)