

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: PORTFOLIO

Report Number: P857042

Luminaire Tested: **LX4C15D010 EX4C159830 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251634)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C15D010 EX4C159830 4LBSWNH
Description:
Light Source: -
Ballast/Driver: -

Summary

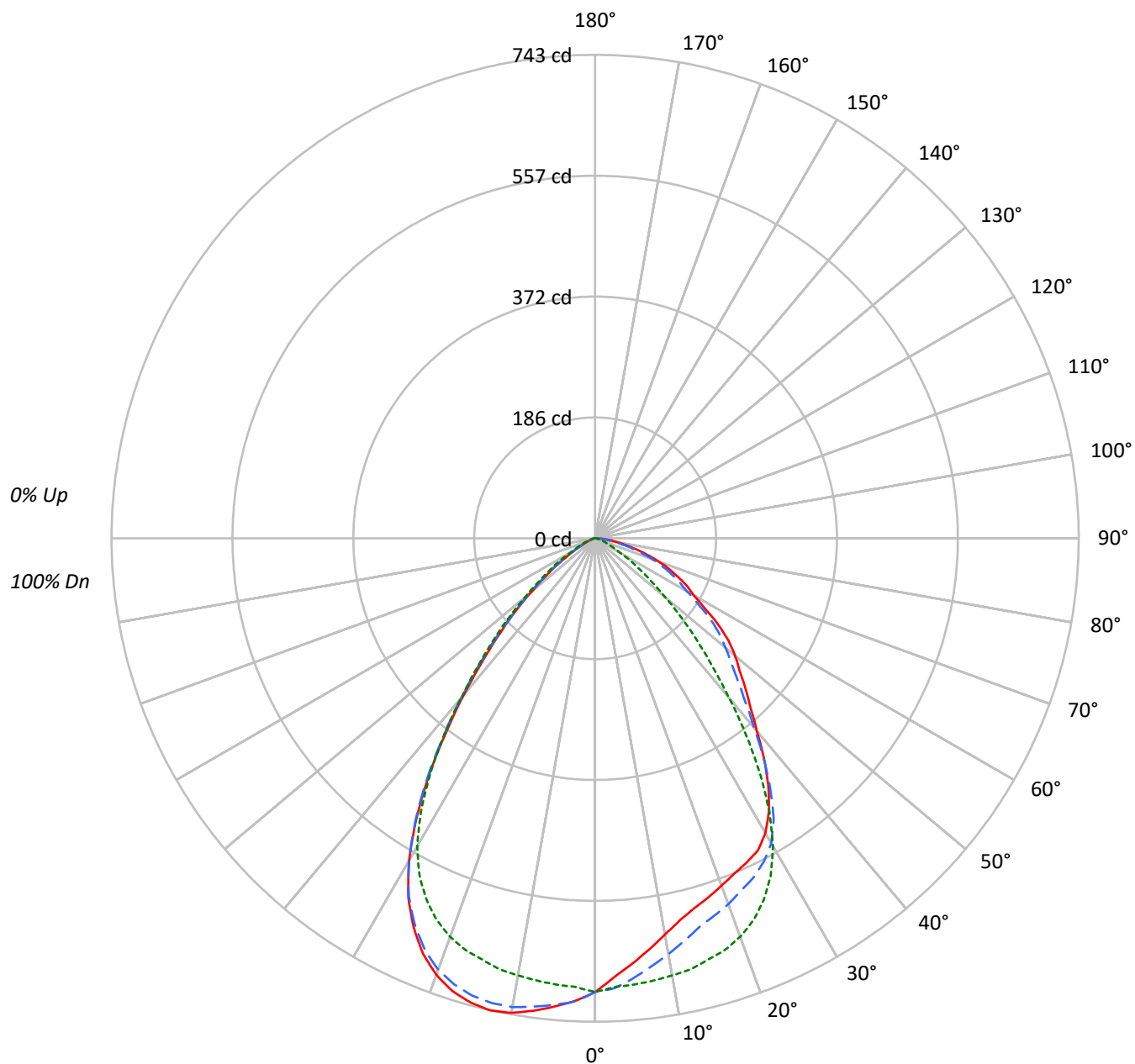
Lumens per Lamp: N/A
Luminaire Lumens: 1222.6 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 15.8
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	108	104	101	109	106	103	100		101	99	97		98	96	94		94	93	91
2	104	97	92	87	101	95	90	86		92	88	84		89	85	82		86	83	81
3	96	88	81	76	94	86	80	75		83	78	74		81	76	73		78	75	72
4	90	80	72	67	88	78	72	66		76	70	66		74	69	65		72	68	64
5	83	73	65	60	82	72	65	59		70	63	59		68	62	58		66	61	58
6	78	67	59	53	76	66	59	53		64	58	53		62	57	52		61	56	52
7	73	61	54	48	71	61	53	48		59	53	48		58	52	48		56	51	47
8	68	57	49	44	67	56	49	44		55	48	44		54	48	43		52	47	43
9	64	52	45	40	63	52	45	40		51	44	40		50	44	40		49	44	40
10	61	49	42	37	59	48	42	37		47	41	37		47	41	37		46	40	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	85678	85678	85678
5°	80912	84908	89113
10°	77132	85104	92389
15°	74875	85279	93966
20°	74259	85189	93308
25°	74555	83094	89425
30°	74206	77526	81087
35°	69559	66185	66859
40°	61984	51320	50165
45°	56692	38258	35912
50°	53611	26796	24216
55°	49285	18078	15207
60°	43048	10615	8403
65°	40756	6802	4680
70°	37141	4849	2910
75°	30711	3418	2136
80°	24196	1910	1273
85°	21426	1269	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	5.4
10°-20°	189.1	15.5
20°-30°	280.3	22.9
30°-40°	280.6	23.0
40°-50°	196.1	16.0
50°-60°	116.7	9.5
60°-70°	60.9	5.0
70°-80°	27.1	2.2
80°-90°	5.9	0.5
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°	535.2	43.8
0°-40°	815.8	66.7
0°-60°	1128.7	92.3
0°-90°	1222.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1222.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	697	697	697	697	697	
5°	656	679	688	720	723	62
15°	589	618	670	728	739	167
25°	550	575	613	655	660	253
35°	464	469	441	449	446	288
45°	326	310	220	213	207	253
55°	230	216	84	74	71	204
65°	140	128	23	17	16	139
75°	65	57	7	4	4	70
85°	15	12	1	1	0	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4
2.5°	675.0	683.1	675.0	677.7	688.5	678.6	684.0	684.0	681.3	687.5	692.1
5°	656.1	664.2	656.1	659.7	671.4	661.5	667.8	666.0	666.9	672.3	678.6
7.5°	637.2	643.5	636.3	640.8	651.6	643.5	648.9	648.9	649.8	657.9	663.4
10°	618.3	623.8	618.3	622.0	633.7	626.4	630.1	630.9	633.7	640.8	648.9
12.5°	601.3	605.8	600.4	605.8	615.7	608.4	613.0	613.9	616.6	624.7	633.7
15°	588.7	593.2	587.8	592.3	601.3	595.9	599.5	601.3	603.1	610.2	618.3
17.5°	578.8	582.4	577.9	583.3	590.5	584.3	589.6	589.6	592.3	599.5	608.4
20°	568.0	571.6	568.0	572.5	580.6	575.3	579.7	579.7	582.4	590.5	598.6
22.5°	558.1	559.9	558.1	561.7	569.8	565.4	568.0	568.9	571.6	578.8	586.1
25°	550.0	553.7	551.8	555.5	560.8	556.4	559.0	559.9	562.6	568.9	575.3
27.5°	541.1	542.9	541.1	545.6	550.0	546.5	549.1	548.2	550.0	555.5	560.8
30°	523.1	524.9	524.9	527.6	531.2	529.4	532.1	529.4	531.2	535.7	541.1
32.5°	497.1	497.9	498.8	501.5	504.2	501.5	503.3	503.3	503.3	507.0	510.5
35°	463.8	465.6	464.7	466.5	469.1	468.3	468.3	467.4	465.6	467.4	469.1
37.5°	426.1	423.3	423.3	426.1	427.9	424.2	426.1	424.2	424.2	425.1	425.1
40°	386.5	383.8	386.5	387.4	388.3	386.5	385.6	383.8	381.0	382.0	380.1
42.5°	353.2	351.4	352.3	352.3	353.2	351.4	352.3	348.8	346.0	344.2	341.5
45°	326.3	323.6	326.3	324.4	324.4	323.6	322.6	320.8	317.3	314.6	310.1
47.5°	301.1	301.1	301.9	301.9	301.9	300.2	300.2	296.6	293.0	289.4	283.1
50°	280.5	278.6	282.2	282.2	279.6	278.6	279.6	275.0	272.3	267.9	261.5
52.5°	258.0	258.0	258.9	258.9	258.0	256.1	257.1	253.4	250.8	246.3	240.0
55°	230.1	228.3	231.0	231.0	230.1	229.2	230.1	227.4	224.7	221.2	215.7
57.5°	198.7	197.7	199.5	200.5	198.7	198.7	199.5	196.8	195.9	192.3	186.9
60°	175.2	174.3	176.1	177.1	175.2	175.2	175.2	171.7	169.9	166.2	162.7
62.5°	159.1	158.2	160.0	159.1	158.2	157.3	158.2	154.6	152.8	149.2	145.6
65°	140.2	141.1	142.1	142.1	141.1	140.2	140.2	138.4	136.6	133.0	128.5
67.5°	122.3	122.3	123.1	124.0	123.1	123.1	123.1	120.4	118.6	115.9	110.6
70°	103.4	102.5	105.1	105.1	103.4	104.2	103.4	102.5	100.7	97.0	92.6
72.5°	83.6	83.6	84.4	84.4	83.6	83.6	83.6	82.7	80.0	78.2	73.7
75°	64.7	64.7	65.6	66.5	64.7	64.7	65.6	63.8	62.0	59.3	56.6
77.5°	48.5	47.6	48.5	48.5	47.6	47.6	47.6	46.7	45.8	43.2	40.5
80°	34.2	33.3	34.2	34.2	34.2	33.3	33.3	32.4	32.4	30.6	27.9
82.5°	23.4	22.5	23.4	23.4	23.4	22.5	22.5	22.5	21.6	20.7	18.9
85°	15.2	14.4	14.4	15.2	14.4	14.4	14.4	14.4	13.5	12.6	11.7
87.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	6.3	6.3	6.3	5.4
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4
2.5°	688.5	686.6	692.1	690.3	691.2	686.6	693.9	690.3	694.8	690.3	699.3
5°	676.7	675.0	683.1	682.2	683.1	679.5	687.5	686.6	692.1	688.5	698.3
7.5°	664.2	662.4	671.4	672.3	674.1	670.5	681.3	681.3	686.6	685.7	696.5
10°	649.8	650.7	659.7	661.5	665.2	663.4	673.2	675.9	683.1	682.2	695.6
12.5°	636.3	636.3	648.0	651.6	654.3	653.4	665.2	668.7	676.7	678.6	691.2
15°	622.9	623.8	634.6	639.9	643.5	642.7	655.3	659.7	669.6	670.5	685.7
17.5°	612.1	611.2	622.9	627.3	632.8	631.9	645.4	650.7	660.6	663.4	677.7
20°	603.1	602.2	613.0	618.3	622.0	621.1	634.6	640.8	649.8	651.6	666.0
22.5°	592.3	590.5	601.3	605.8	609.4	608.4	620.2	624.7	633.7	635.5	648.9
25°	579.7	577.9	587.8	590.5	593.2	591.4	601.3	604.0	611.2	613.0	626.4
27.5°	565.4	560.8	568.9	568.9	570.7	568.0	575.3	577.9	584.3	584.3	596.8
30°	542.9	536.6	541.1	540.2	541.1	537.5	542.0	542.9	547.4	546.5	555.5
32.5°	511.4	502.4	505.2	502.4	499.7	494.4	499.7	497.9	501.5	497.9	506.0
35°	468.3	459.2	458.4	454.8	452.1	447.6	447.6	443.1	444.0	441.3	446.7
37.5°	421.5	409.8	408.1	400.8	396.4	390.9	390.9	387.4	382.9	381.0	385.6
40°	375.7	363.1	358.7	347.0	342.4	337.1	333.4	329.0	327.2	320.0	323.6
42.5°	336.2	322.6	312.8	300.2	295.7	287.6	282.2	276.8	274.1	266.0	269.7
45°	302.9	286.7	275.9	259.8	253.4	244.5	236.4	230.1	223.8	220.2	218.4
47.5°	275.0	258.0	243.5	225.6	215.7	207.6	196.8	190.6	182.5	178.0	175.2
50°	251.6	232.7	216.6	195.9	186.1	177.1	164.4	154.6	147.4	140.2	138.4
52.5°	231.0	211.3	193.2	169.9	158.2	147.4	133.9	123.1	116.8	108.8	107.8
55°	206.7	189.7	169.9	145.6	133.9	123.1	108.8	98.0	89.9	84.4	82.7
57.5°	180.7	164.4	145.6	121.4	109.7	98.0	84.4	74.5	67.4	63.0	62.0
60°	156.4	141.1	123.1	98.9	87.1	77.3	63.0	53.1	46.7	43.2	41.3
62.5°	138.4	124.0	107.0	84.4	73.7	63.8	50.4	41.3	35.9	32.4	30.6
65°	121.4	107.0	91.7	71.0	62.0	53.1	40.5	32.4	26.9	23.4	21.6
67.5°	103.4	90.8	76.4	59.3	50.4	43.2	32.4	25.1	20.7	17.9	16.1
70°	85.3	73.7	62.0	47.6	41.3	34.2	25.1	19.8	15.2	13.5	11.7
72.5°	67.4	58.4	48.5	36.8	31.5	26.9	19.8	14.4	11.7	9.9	8.1
75°	50.4	44.1	35.9	27.9	23.4	19.8	14.4	10.8	9.0	7.2	6.3
77.5°	35.9	30.6	25.1	18.9	17.1	14.4	9.9	8.1	6.3	4.5	3.6
80°	24.3	21.6	17.1	13.5	10.8	9.9	7.2	5.4	3.6	2.7	2.7
82.5°	16.1	13.5	10.8	8.1	7.2	6.3	4.5	3.6	2.7	1.8	1.8
85°	9.9	8.1	6.3	4.5	4.5	3.6	2.7	1.8	0.9	0.9	0.9
87.5°	4.5	3.6	2.7	1.8	1.8	0.9	0.9	0.9	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4
2.5°	706.4	701.1	697.4	702.0	703.8	701.1	703.8	708.2	712.8	713.7	701.1
5°	707.3	702.0	700.1	705.5	706.4	705.5	708.2	714.6	719.9	721.8	709.2
7.5°	707.3	703.8	702.9	709.2	710.0	709.2	713.7	720.8	726.2	729.8	717.2
10°	705.5	703.8	704.7	710.0	711.9	711.9	718.1	726.2	731.6	735.2	722.6
12.5°	702.9	702.9	702.9	709.2	711.0	711.9	717.2	728.0	731.6	737.0	724.5
15°	698.3	698.3	698.3	704.7	707.3	707.3	713.7	723.6	728.0	733.4	720.8
17.5°	690.3	690.3	691.2	696.5	699.3	699.3	705.5	716.3	719.0	725.3	712.8
20°	678.6	678.6	679.5	684.9	687.5	685.7	693.9	702.9	705.5	711.0	698.3
22.5°	661.5	661.5	661.5	666.9	668.7	667.8	675.9	684.0	684.0	691.2	677.7
25°	636.3	638.1	636.3	641.7	643.5	642.7	649.8	657.0	655.3	663.4	649.8
27.5°	605.8	604.9	604.9	609.4	609.4	608.4	613.9	622.0	620.2	625.6	613.0
30°	563.6	566.3	561.7	568.0	565.4	563.6	567.1	574.3	571.6	576.2	566.3
32.5°	515.0	511.4	511.4	511.4	513.2	508.7	512.3	515.9	513.2	517.7	507.0
35°	451.2	452.1	449.3	450.3	451.2	445.8	449.3	453.0	449.3	452.1	442.2
37.5°	387.4	388.3	382.0	385.6	382.0	380.1	383.8	385.6	382.0	384.7	373.9
40°	323.6	321.7	320.8	320.8	321.7	317.3	320.0	322.6	320.0	321.7	311.8
42.5°	267.9	267.0	265.2	266.0	263.3	262.4	263.3	266.0	263.3	265.2	258.0
45°	219.3	217.5	214.8	215.7	215.7	211.3	213.9	215.7	213.0	213.9	207.6
47.5°	174.3	171.7	171.7	170.8	170.8	169.0	171.7	170.8	168.1	169.9	163.5
50°	135.7	133.9	133.9	133.9	133.9	131.2	132.2	133.9	131.2	131.2	127.6
52.5°	106.0	103.4	101.6	101.6	101.6	100.7	100.7	101.6	98.9	98.9	98.0
55°	80.0	79.1	76.4	76.4	76.4	73.7	74.5	74.5	73.7	73.7	71.0
57.5°	59.3	56.6	54.8	54.8	53.1	53.1	52.2	53.1	51.2	51.2	49.4
60°	39.5	37.7	36.8	35.9	35.9	35.0	35.9	35.0	35.0	34.2	33.3
62.5°	28.7	26.9	25.1	25.1	25.1	24.3	24.3	24.3	24.3	24.3	23.4
65°	20.7	18.9	18.9	17.9	17.9	17.1	17.1	17.1	17.1	17.1	16.1
67.5°	14.4	13.5	12.6	12.6	12.6	12.6	12.6	12.6	11.7	11.7	11.7
70°	10.8	9.9	9.0	9.0	9.0	9.0	9.0	8.1	9.0	9.0	8.1
72.5°	7.2	7.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
75°	5.4	5.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
77.5°	3.6	3.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
80°	2.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
82.5°	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
85°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	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



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CATALOG NUMBER: LX4C15D010 EX4C159830 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	697.4	697.4	697.4	697.4	697.4	697.4	697.4	697.4
2.5°	714.6	713.7	711.9	714.6	707.3	704.7	703.8	711.9
5°	724.5	722.6	722.6	725.3	717.2	715.4	713.7	722.6
7.5°	733.4	731.6	731.6	734.3	727.1	725.3	723.6	732.5
10°	738.8	738.8	738.8	740.6	734.3	732.5	731.6	740.6
12.5°	741.5	741.5	740.6	744.2	736.1	736.1	734.3	743.3
15°	737.9	737.9	737.9	740.6	733.4	731.6	731.6	738.8
17.5°	728.9	728.9	728.0	730.7	722.6	722.6	721.8	729.8
20°	715.4	715.4	713.7	717.2	709.2	706.4	705.5	713.7
22.5°	693.9	693.0	692.1	693.9	686.6	684.9	684.0	691.2
25°	666.0	665.2	663.4	665.2	657.0	654.3	654.3	659.7
27.5°	626.4	626.4	623.8	626.4	617.4	616.6	615.7	622.0
30°	577.9	574.3	572.5	576.2	567.1	567.1	565.4	571.6
32.5°	517.7	514.1	513.2	515.0	507.0	504.2	507.8	511.4
35°	448.5	449.3	445.8	445.8	438.6	439.5	440.4	445.8
37.5°	382.0	380.1	379.3	380.1	374.8	373.0	371.2	376.6
40°	320.0	315.5	314.6	314.6	310.1	309.2	310.1	312.8
42.5°	261.5	260.7	257.1	258.9	254.3	256.1	255.2	255.2
45°	211.3	212.1	208.5	211.3	207.6	204.9	204.9	206.7
47.5°	167.2	167.2	166.2	166.2	163.5	164.4	162.7	165.4
50°	129.4	129.4	127.6	128.5	126.7	126.7	125.8	126.7
52.5°	98.9	98.0	98.0	97.0	95.2	96.2	97.0	95.2
55°	71.9	72.8	71.0	71.9	70.1	71.0	70.1	71.0
57.5°	49.4	50.4	48.5	50.4	48.5	49.4	48.5	48.5
60°	34.2	34.2	33.3	34.2	33.3	33.3	32.4	34.2
62.5°	23.4	23.4	23.4	23.4	23.4	22.5	23.4	23.4
65°	17.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
67.5°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
70°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
72.5°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
75°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
77.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
82.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
85°	0.9	0.9	0.9	0.0	0.9	0.0	0.0	0.0
87.5°	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



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)