

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: P857081

Luminaire Tested: **LX4C15D010 EX4C159850 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857081
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 EX4C159850 4LBSWNH
Description:
Light Source: -
Ballast/Driver: -

Summary

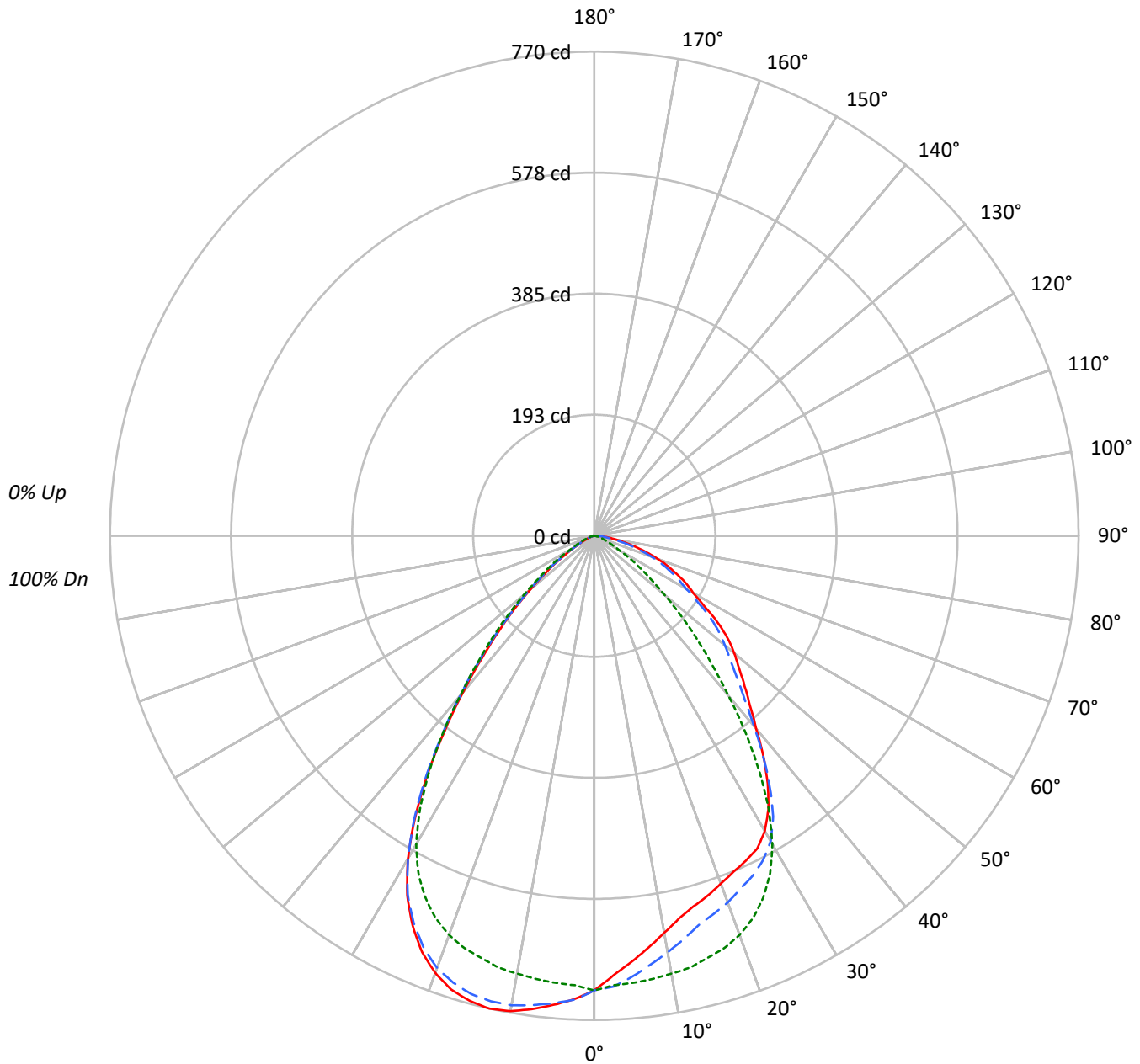
Lumens per Lamp: N/A
Luminaire Lumens: 1267.2 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P857081

CATALOG NUMBER: LX4C15D010 EX4C159850 4LBSWNH

Luminous Intensity Polar Plot





TEST NUMBER: P857081

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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°	88811	88811	88811
5°	83859	88003	92369
10°	79951	88210	95757
15°	77597	88382	97387
20°	76965	88300	96707
25°	77279	86131	92692
30°	76916	80335	84051
35°	72079	68599	69289
40°	64246	53180	51993
45°	58742	39648	37233
50°	55541	27790	25114
55°	51084	18763	15764
60°	44620	10983	8698
65°	42267	7064	4884
70°	38470	5029	3017
75°	31850	3560	2183
80°	25045	2052	1344
85°	22412	1410	0



TEST NUMBER: P857081

CATALOG NUMBER: LX4C15D010 EX4C159850 4LBSWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	5.4
10°-20°	195.9	15.5
20°-30°	290.5	22.9
30°-40°	290.9	23.0
40°-50°	203.3	16.0
50°-60°	121.0	9.5
60°-70°	63.1	5.0
70°-80°	28.1	2.2
80°-90°	6.1	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°	554.7	43.8
0°-40°	845.6	66.7
0°-60°	1169.8	92.3
0°-90°	1267.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1267.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	723	723	723	723	723	
5°	680	703	714	746	749	64
15°	610	641	695	755	766	173
25°	570	596	635	679	684	263
35°	481	486	457	466	462	298
45°	338	321	228	221	214	263
55°	238	224	88	76	74	212
65°	145	133	24	18	17	144
75°	67	59	8	5	5	73
85°	16	12	1	1	0	18
90°	0	0	0	0	0	



TEST NUMBER: P857081

CATALOG NUMBER: LX4C15D010 EX4C159850 4LBSWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9
2.5°	699.6	708.0	699.6	702.4	713.6	703.3	708.9	708.9	706.2	712.7	717.3
5°	680.0	688.4	680.0	683.8	695.9	685.6	692.2	690.3	691.3	696.8	703.3
7.5°	660.5	667.0	659.5	664.3	675.4	667.0	672.6	672.6	673.5	681.9	687.5
10°	640.9	646.5	640.9	644.6	656.8	649.3	653.0	653.9	656.8	664.3	672.6
12.5°	623.2	627.9	622.3	627.9	638.1	630.6	635.4	636.3	639.0	647.5	656.8
15°	610.1	614.9	609.2	613.9	623.2	617.6	621.4	623.2	625.1	632.5	640.9
17.5°	600.0	603.7	599.0	604.6	612.0	605.5	611.1	611.1	613.9	621.4	630.6
20°	588.7	592.5	588.7	593.4	601.8	596.2	600.9	600.9	603.7	612.0	620.5
22.5°	578.5	580.3	578.5	582.2	590.6	586.0	588.7	589.7	592.5	600.0	607.4
25°	570.1	573.8	572.0	575.7	581.3	576.7	579.5	580.3	583.1	589.7	596.2
27.5°	560.8	562.7	560.8	565.5	570.1	566.3	569.2	568.2	570.1	575.7	581.3
30°	542.2	544.1	544.1	546.8	550.6	548.7	551.5	548.7	550.6	555.2	560.8
32.5°	515.2	516.1	517.0	519.8	522.6	519.8	521.7	521.7	521.7	525.4	529.2
35°	480.6	482.5	481.6	483.5	486.3	485.4	485.4	484.4	482.5	484.4	486.3
37.5°	441.6	438.7	438.7	441.6	443.5	439.7	441.6	439.7	439.7	440.6	440.6
40°	400.6	397.8	400.6	401.6	402.4	400.6	399.7	397.8	395.0	395.9	394.1
42.5°	366.1	364.2	365.2	365.2	366.1	364.2	365.2	361.4	358.7	356.8	354.0
45°	338.1	335.4	338.1	336.3	336.3	335.4	334.4	332.5	328.9	326.0	321.4
47.5°	312.1	312.1	313.0	313.0	313.0	311.1	311.1	307.4	303.6	300.0	293.5
50°	290.6	288.7	292.5	292.5	289.7	288.7	289.7	285.1	282.2	277.6	271.1
52.5°	267.3	267.3	268.3	268.3	267.3	265.5	266.5	262.7	259.9	255.2	248.7
55°	238.5	236.7	239.4	239.4	238.5	237.6	238.5	235.7	232.9	229.2	223.6
57.5°	205.9	204.9	206.8	207.8	205.9	205.9	206.8	204.0	203.0	199.3	193.8
60°	181.6	180.8	182.6	183.5	181.6	181.6	181.6	177.9	176.0	172.3	168.6
62.5°	164.9	164.0	165.9	164.9	164.0	163.0	164.0	160.2	158.4	154.6	150.9
65°	145.4	146.2	147.2	147.2	146.2	145.4	145.4	143.5	141.6	137.9	133.2
67.5°	126.7	126.7	127.6	128.5	127.6	127.6	127.6	124.8	123.0	120.2	114.6
70°	107.1	106.2	109.0	109.0	107.1	108.1	107.1	106.2	104.3	100.6	96.0
72.5°	86.6	86.6	87.6	87.6	86.6	86.6	86.6	85.7	82.9	81.1	76.4
75°	67.1	67.1	68.0	68.9	67.1	67.1	68.0	66.2	64.3	61.5	58.7
77.5°	50.3	49.4	50.3	50.3	49.4	49.4	49.4	48.4	47.5	44.7	41.9
80°	35.4	34.5	35.4	35.4	35.4	34.5	34.5	33.5	33.5	31.7	28.9
82.5°	24.3	23.3	24.3	24.3	24.3	23.3	23.3	23.3	22.4	21.4	19.5
85°	15.9	14.9	14.9	15.9	14.9	14.9	14.9	14.9	14.0	13.0	12.1
87.5°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	6.5	6.5	6.5	5.6
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: P857081

CATALOG NUMBER: LX4C15D010 EX4C159850 4LBSWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9
2.5°	713.6	711.7	717.3	715.4	716.3	711.7	719.2	715.4	720.1	715.4	724.7
5°	701.4	699.6	708.0	707.1	708.0	704.3	712.7	711.7	717.3	713.6	723.8
7.5°	688.4	686.6	695.9	696.8	698.7	694.9	706.2	706.2	711.7	710.8	722.0
10°	673.5	674.4	683.8	685.6	689.4	687.5	697.7	700.6	708.0	707.1	721.1
12.5°	659.5	659.5	671.7	675.4	678.2	677.3	689.4	693.1	701.4	703.3	716.3
15°	645.6	646.5	657.7	663.3	667.0	666.0	679.2	683.8	694.0	694.9	710.8
17.5°	634.4	633.5	645.6	650.3	655.8	654.9	668.9	674.4	684.7	687.5	702.4
20°	625.1	624.1	635.4	640.9	644.6	643.7	657.7	664.3	673.5	675.4	690.3
22.5°	613.9	612.0	623.2	627.9	631.6	630.6	642.8	647.5	656.8	658.6	672.6
25°	600.9	599.0	609.2	612.0	614.9	613.0	623.2	626.0	633.5	635.4	649.3
27.5°	586.0	581.3	589.7	589.7	591.6	588.7	596.2	599.0	605.5	605.5	618.6
30°	562.7	556.2	560.8	559.9	560.8	557.1	561.7	562.7	567.3	566.3	575.7
32.5°	530.1	520.8	523.5	520.8	517.9	512.4	517.9	516.1	519.8	516.1	524.4
35°	485.4	476.0	475.1	471.4	468.6	463.9	463.9	459.2	460.2	457.4	463.0
37.5°	436.9	424.8	423.0	415.5	410.8	405.2	405.2	401.6	396.8	395.0	399.7
40°	389.4	376.3	371.7	359.6	354.9	349.3	345.6	341.0	339.1	331.6	335.4
42.5°	348.4	334.4	324.2	311.1	306.5	298.1	292.5	286.9	284.1	275.7	279.5
45°	314.0	297.2	286.0	269.2	262.7	253.4	245.0	238.5	231.9	228.2	226.4
47.5°	285.1	267.3	252.5	233.8	223.6	215.2	204.0	197.5	189.1	184.4	181.6
50°	260.8	241.3	224.5	203.0	192.9	183.5	170.5	160.2	152.8	145.4	143.5
52.5°	239.4	218.9	200.3	176.0	164.0	152.8	138.8	127.6	121.1	112.7	111.8
55°	214.3	196.5	176.0	150.9	138.8	127.6	112.7	101.6	93.2	87.6	85.7
57.5°	187.3	170.5	150.9	125.7	113.6	101.6	87.6	77.3	69.8	65.2	64.3
60°	162.1	146.2	127.6	102.5	90.3	80.1	65.2	54.9	48.4	44.7	42.8
62.5°	143.5	128.5	110.8	87.6	76.4	66.2	52.2	42.8	37.3	33.5	31.7
65°	125.7	110.8	95.1	73.6	64.3	54.9	41.9	33.5	27.9	24.3	22.4
67.5°	107.1	94.1	79.2	61.5	52.2	44.7	33.5	26.0	21.4	18.6	16.8
70°	88.5	76.4	64.3	49.4	42.8	35.4	26.0	20.5	15.9	14.0	12.1
72.5°	69.8	60.5	50.3	38.2	32.6	27.9	20.5	14.9	12.1	10.3	8.4
75°	52.2	45.7	37.3	28.9	24.3	20.5	14.9	11.1	9.3	7.5	6.5
77.5°	37.3	31.7	26.0	19.5	17.7	14.9	10.3	8.4	6.5	4.6	3.7
80°	25.1	22.4	17.7	14.0	11.1	10.3	7.5	5.6	3.7	2.9	2.9
82.5°	16.8	14.0	11.1	8.4	7.5	6.5	4.6	3.7	2.9	1.9	1.9
85°	10.3	8.4	6.5	4.6	4.6	3.7	2.9	1.9	1.0	1.0	1.0
87.5°	4.6	3.7	2.9	1.9	1.9	1.0	1.0	1.0	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: P857081

CATALOG NUMBER: LX4C15D010 EX4C159850 4LBSWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9
2.5°	732.2	726.6	722.9	727.6	729.4	726.6	729.4	734.1	738.7	739.7	726.6
5°	733.2	727.6	725.7	731.2	732.2	731.2	734.1	740.6	746.2	748.1	735.1
7.5°	733.2	729.4	728.5	735.1	736.0	735.1	739.7	747.1	752.7	756.5	743.4
10°	731.2	729.4	730.3	736.0	737.8	737.8	744.3	752.7	758.2	762.0	749.0
12.5°	728.5	728.5	728.5	735.1	736.8	737.8	743.4	754.6	758.2	763.9	750.8
15°	723.8	723.8	723.8	730.3	733.2	733.2	739.7	750.0	754.6	760.1	747.1
17.5°	715.4	715.4	716.3	722.0	724.7	724.7	731.2	742.5	745.2	751.8	738.7
20°	703.3	703.3	704.3	709.8	712.7	710.8	719.2	728.5	731.2	736.8	723.8
22.5°	685.6	685.6	685.6	691.3	693.1	692.2	700.6	708.9	708.9	716.3	702.4
25°	659.5	661.4	659.5	665.2	667.0	666.0	673.5	680.9	679.2	687.5	673.5
27.5°	627.9	626.9	626.9	631.6	631.6	630.6	636.3	644.6	642.8	648.4	635.4
30°	584.1	586.9	582.2	588.7	586.0	584.1	587.8	595.2	592.5	597.1	586.9
32.5°	533.8	530.1	530.1	530.1	531.9	527.3	531.0	534.7	531.9	536.6	525.4
35°	467.6	468.6	465.8	466.7	467.6	462.0	465.8	469.5	465.8	468.6	458.4
37.5°	401.6	402.4	395.9	399.7	395.9	394.1	397.8	399.7	395.9	398.7	387.6
40°	335.4	333.5	332.5	332.5	333.5	328.9	331.6	334.4	331.6	333.5	323.3
42.5°	277.6	276.7	274.8	275.7	273.0	272.0	273.0	275.7	273.0	274.8	267.3
45°	227.3	225.4	222.7	223.6	223.6	218.9	221.7	223.6	220.8	221.7	215.2
47.5°	180.8	177.9	177.9	177.0	177.0	175.1	177.9	177.0	174.2	176.0	169.5
50°	140.6	138.8	138.8	138.8	138.8	136.0	137.0	138.8	136.0	136.0	132.2
52.5°	110.0	107.1	105.3	105.3	105.3	104.3	104.3	105.3	102.5	102.5	101.6
55°	82.9	82.0	79.2	79.2	79.2	76.4	77.3	77.3	76.4	76.4	73.6
57.5°	61.5	58.7	56.8	56.8	54.9	54.9	54.0	54.9	53.1	53.1	51.3
60°	40.9	39.1	38.2	37.3	37.3	36.3	37.3	36.3	36.3	35.4	34.5
62.5°	29.8	27.9	26.0	26.0	26.0	25.1	25.1	25.1	25.1	25.1	24.3
65°	21.4	19.5	19.5	18.6	18.6	17.7	17.7	17.7	17.7	17.7	16.8
67.5°	14.9	14.0	13.0	13.0	13.0	13.0	13.0	13.0	12.1	12.1	12.1
70°	11.1	10.3	9.3	9.3	9.3	9.3	9.3	8.4	9.3	9.3	8.4
72.5°	7.5	7.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
75°	5.6	5.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
77.5°	3.7	3.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
80°	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
82.5°	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	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: P857081

CATALOG NUMBER: LX4C15D010 EX4C159850 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	722.9	722.9	722.9	722.9	722.9	722.9	722.9	722.9
2.5°	740.6	739.7	737.8	740.6	733.2	730.3	729.4	737.8
5°	750.8	749.0	749.0	751.8	743.4	741.5	739.7	749.0
7.5°	760.1	758.2	758.2	761.1	753.6	751.8	750.0	759.2
10°	765.7	765.7	765.7	767.6	761.1	759.2	758.2	767.6
12.5°	768.5	768.5	767.6	771.4	763.0	763.0	761.1	770.4
15°	764.8	764.8	764.8	767.6	760.1	758.2	758.2	765.7
17.5°	755.5	755.5	754.6	757.4	749.0	749.0	748.1	756.5
20°	741.5	741.5	739.7	743.4	735.1	732.2	731.2	739.7
22.5°	719.2	718.2	717.3	719.2	711.7	709.8	708.9	716.3
25°	690.3	689.4	687.5	689.4	680.9	678.2	678.2	683.8
27.5°	649.3	649.3	646.5	649.3	640.0	639.0	638.1	644.6
30°	599.0	595.2	593.4	597.1	587.8	587.8	586.0	592.5
32.5°	536.6	532.9	531.9	533.8	525.4	522.6	526.3	530.1
35°	464.9	465.8	462.0	462.0	454.6	455.5	456.5	462.0
37.5°	395.9	394.1	393.1	394.1	388.4	386.6	384.8	390.3
40°	331.6	327.0	326.0	326.0	321.4	320.5	321.4	324.2
42.5°	271.1	270.2	266.5	268.3	263.6	265.5	264.6	264.6
45°	218.9	219.8	216.1	218.9	215.2	212.4	212.4	214.3
47.5°	173.3	173.3	172.3	172.3	169.5	170.5	168.6	171.4
50°	134.1	134.1	132.2	133.2	131.4	131.4	130.4	131.4
52.5°	102.5	101.6	101.6	100.6	98.7	99.7	100.6	98.7
55°	74.5	75.4	73.6	74.5	72.7	73.6	72.7	73.6
57.5°	51.3	52.2	50.3	52.2	50.3	51.3	50.3	50.3
60°	35.4	35.4	34.5	35.4	34.5	34.5	33.5	35.4
62.5°	24.3	24.3	24.3	24.3	24.3	23.3	24.3	24.3
65°	17.7	16.8	16.8	16.8	16.8	16.8	16.8	16.8
67.5°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
70°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
72.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
75°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
80°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)