

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: P857097

Luminaire Tested: **LX4C15D010 EX4C159030 4LBLWW***

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P857097
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C15D010 EX4C159030 4LBLWW*
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

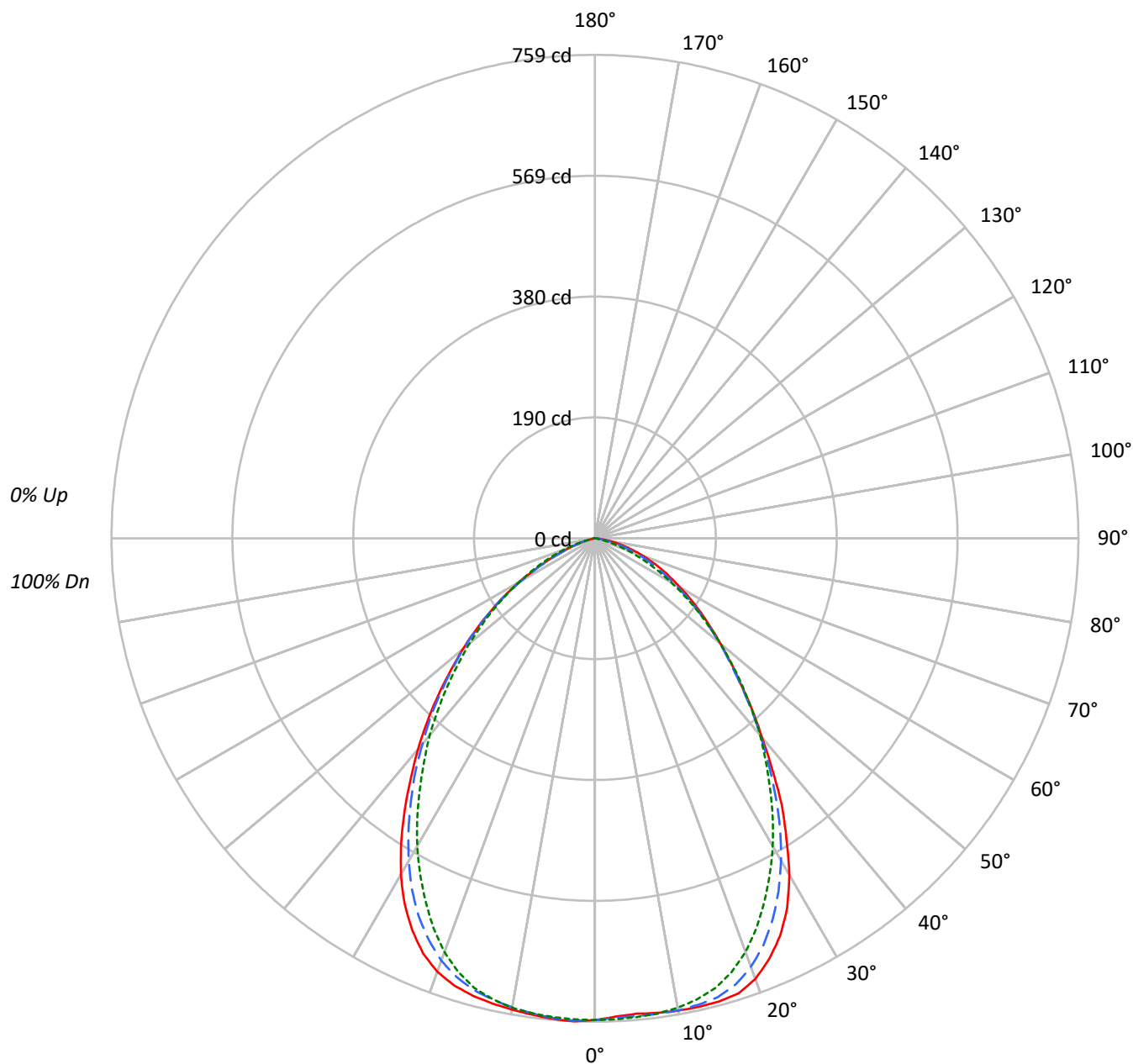
Lumens per Lamp: N/A
Luminaire Lumens: 1450.2 lumens
Efficiency: N/A
Efficacy: 62.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	101	109	105	102	99		101	99	96			97	95	93			94
2	103	96	91	86	101	95	89	85		91	87	83			88	84	81			85
3	95	87	80	74	93	85	79	74		82	77	72			80	75	71			77
4	88	78	71	65	86	77	70	65		75	69	64			72	67	63			70
5	82	71	63	57	80	70	63	57		68	61	57			66	60	56			64
6	76	65	57	51	75	64	56	51		62	56	51			61	55	50			59
7	71	59	51	46	70	59	51	46		57	50	46			56	50	45			54
8	67	55	47	42	65	54	47	42		53	46	41			52	46	41			50
9	63	51	43	38	61	50	43	38		49	42	38			48	42	38			47
10	59	47	40	35	58	46	39	35		45	39	35			45	39	35			44

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	92926	92926	92926
5°	92406	93047	93392
10°	93936	93374	93724
15°	95772	92961	94513
20°	96249	90353	94654
25°	93288	85304	92014
30°	86591	79171	86435
35°	76668	71824	78123
40°	65368	64679	69281
45°	56153	56796	60358
50°	49024	49139	51738
55°	43309	41510	42902
60°	37986	33858	33711
65°	33634	26221	23372
70°	28628	18032	13865
75°	23164	9683	6313
80°	15848	2476	1556
85°	4934	846	846



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	5.0
10°-20°	208.1	14.4
20°-30°	300.7	20.7
30°-40°	310.9	21.4
40°-50°	256.9	17.7
50°-60°	177.3	12.2
60°-70°	92.8	6.4
70°-80°	29.2	2.0
80°-90°	2.5	0.2
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°	580.7	40.0
0°-40°	891.5	61.5
0°-60°	1325.7	91.4
0°-90°	1450.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1450.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	756	756	756	756	756	
5°	749	753	754	756	757	72
15°	753	746	731	734	743	212
25°	688	660	629	655	679	314
35°	511	494	479	504	521	317
45°	323	322	327	342	347	252
55°	202	196	194	199	200	182
65°	116	105	90	75	80	115
75°	49	38	20	14	13	52
85°	4	2	1	1	1	7
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°	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4
2.5°	751.6	751.9	751.9	752.4	752.4	752.4	752.7	752.7	753.0	753.2	753.5
5°	749.3	749.3	749.9	750.1	750.7	751.0	751.6	751.9	752.4	752.7	753.0
7.5°	751.6	751.6	751.9	752.1	752.1	752.4	752.4	752.7	753.0	753.2	753.2
10°	753.0	753.0	753.0	753.0	753.2	753.2	753.2	753.0	753.0	753.0	752.7
12.5°	753.5	753.5	753.2	753.0	753.2	753.0	753.0	752.1	751.6	751.0	750.1
15°	753.0	753.0	752.7	752.4	752.1	751.6	751.3	749.9	748.7	747.0	745.8
17.5°	749.3	748.7	748.3	747.6	746.4	745.6	745.0	742.5	740.5	737.7	734.5
20°	736.2	735.7	734.7	733.3	731.9	730.9	729.1	725.5	723.4	719.2	716.1
22.5°	714.9	714.4	714.7	712.1	709.3	707.5	706.4	703.3	699.8	694.5	691.1
25°	688.2	686.5	686.5	682.6	681.2	680.0	678.6	674.9	669.7	664.9	660.5
27.5°	653.6	651.3	650.2	649.6	646.1	643.7	641.6	638.8	634.5	630.4	624.1
30°	610.4	610.1	608.7	606.1	603.5	602.5	600.1	595.4	591.4	588.2	584.3
32.5°	559.6	559.3	559.3	559.3	557.5	557.3	553.9	551.3	548.2	543.4	540.7
35°	511.2	511.0	511.2	507.1	505.9	505.0	504.7	503.0	498.7	496.5	494.3
37.5°	456.7	457.5	457.0	455.9	457.3	454.8	456.7	453.1	451.3	450.7	448.3
40°	407.6	409.9	407.6	407.9	409.3	406.8	406.8	406.2	405.0	404.4	403.9
42.5°	365.6	362.7	364.4	362.9	364.4	363.5	362.1	362.9	363.3	362.1	361.9
45°	323.2	323.8	324.4	323.6	323.6	322.8	325.0	323.6	323.6	323.8	321.7
47.5°	288.9	288.1	288.6	288.1	288.3	287.8	288.3	288.6	288.1	288.1	286.2
50°	256.5	255.9	258.0	256.1	256.1	255.9	256.1	255.7	254.7	254.7	255.3
52.5°	228.4	227.2	226.9	228.4	226.4	226.4	226.6	226.1	225.0	224.4	223.0
55°	202.2	202.0	202.2	201.1	200.6	200.6	199.1	198.6	198.3	196.8	196.0
57.5°	177.8	177.0	177.2	177.0	175.8	175.6	174.3	174.3	173.2	172.1	170.8
60°	154.6	154.6	155.4	154.2	153.4	152.8	152.2	151.7	149.7	147.7	146.0
62.5°	133.8	134.1	133.8	132.9	132.4	131.8	131.2	129.6	127.8	126.7	124.7
65°	115.7	115.2	114.4	113.8	112.4	112.4	111.4	110.5	108.5	106.8	104.8
67.5°	96.8	96.3	96.3	96.3	94.6	94.3	93.7	92.1	90.2	88.0	86.4
70°	79.7	80.4	79.5	78.7	77.9	77.5	76.7	75.1	73.0	70.7	69.3
72.5°	63.6	64.2	63.4	63.0	61.3	60.7	60.5	59.1	56.8	55.3	53.1
75°	48.8	49.1	48.6	48.0	46.9	46.6	45.2	44.0	42.6	40.4	38.3
77.5°	35.2	34.7	34.7	33.5	32.3	32.3	32.1	30.4	28.5	26.7	25.0
80°	22.4	22.2	21.4	20.8	19.9	19.6	19.3	17.9	16.5	15.4	14.1
82.5°	11.3	11.1	10.8	10.5	9.9	9.4	9.7	8.5	7.9	6.8	6.0
85°	3.5	3.7	3.7	3.5	3.1	3.1	3.1	2.8	2.2	2.0	1.6
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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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4
2.5°	753.8	754.2	754.5	754.7	754.7	755.0	755.3	755.5	755.9	755.9	756.1
5°	753.2	753.8	753.8	754.2	754.2	754.2	754.5	754.5	754.5	754.5	754.7
7.5°	753.5	753.5	753.5	753.2	753.2	753.0	753.0	753.0	752.4	752.4	752.4
10°	752.1	751.9	751.6	751.0	750.7	750.5	749.9	749.3	748.7	748.5	747.8
12.5°	749.3	748.3	747.0	745.8	745.4	745.0	744.0	743.1	742.1	741.3	740.7
15°	743.6	741.9	739.9	737.7	737.2	736.6	734.5	732.9	731.7	730.9	729.4
17.5°	732.3	728.8	726.6	723.2	721.8	721.2	718.0	716.3	714.4	713.8	712.7
20°	712.1	708.9	704.7	701.6	699.8	698.2	695.6	693.3	691.1	691.1	689.7
22.5°	686.8	682.8	677.5	673.5	673.2	669.7	667.5	664.9	664.0	662.4	662.4
25°	655.0	651.6	645.7	642.3	640.4	639.6	636.0	632.6	630.8	629.3	630.6
27.5°	619.8	614.6	610.1	605.9	604.5	602.7	599.3	597.9	594.9	594.5	594.2
30°	579.5	574.3	569.8	567.8	565.0	563.5	561.0	559.3	558.1	558.1	557.5
32.5°	537.1	532.6	530.3	526.0	524.6	522.6	520.9	519.2	519.8	519.2	519.5
35°	491.4	490.3	486.0	483.5	483.5	483.2	480.3	479.2	478.6	478.9	480.3
37.5°	447.9	444.5	441.7	440.0	441.5	439.6	439.4	439.4	441.1	440.0	442.3
40°	401.7	401.3	400.3	400.9	401.1	399.0	399.7	399.9	401.1	403.3	403.6
42.5°	361.3	361.1	361.1	361.1	360.5	359.3	360.5	362.5	362.1	363.9	365.3
45°	322.4	321.7	323.0	322.1	323.8	324.4	323.6	324.2	325.8	326.9	329.2
47.5°	286.9	286.9	287.2	287.8	286.0	287.5	288.1	289.2	290.0	290.6	291.7
50°	253.9	253.9	253.4	253.4	253.4	254.2	253.1	254.5	254.7	257.1	258.6
52.5°	223.5	222.1	223.0	222.5	221.2	220.6	221.2	221.5	223.3	223.9	225.5
55°	194.6	194.6	192.4	191.7	192.6	192.4	191.9	191.9	193.0	193.8	195.2
57.5°	169.0	167.3	165.5	165.3	164.5	164.7	164.7	164.5	163.9	164.2	164.5
60°	144.8	143.7	141.1	141.1	140.9	140.7	139.3	138.8	137.4	137.8	136.6
62.5°	122.7	122.2	118.7	117.7	117.7	116.7	115.2	115.0	113.0	113.0	111.9
65°	102.7	101.1	99.1	97.1	97.1	96.0	95.1	92.7	91.2	90.2	88.6
67.5°	84.6	82.1	80.2	78.3	77.3	76.9	75.1	73.2	71.0	69.6	67.0
70°	67.0	65.0	63.0	61.3	60.2	59.1	57.1	54.5	52.9	50.2	48.6
72.5°	50.5	48.8	47.2	44.9	43.4	42.6	40.6	38.3	35.5	33.8	31.5
75°	36.3	34.4	32.1	30.1	29.3	28.5	26.0	24.4	22.4	20.4	18.2
77.5°	23.6	21.4	19.6	17.4	17.0	16.5	14.1	12.5	11.1	9.9	8.5
80°	12.5	11.3	9.9	8.5	7.9	7.1	6.0	5.1	4.3	3.5	2.8
82.5°	5.4	4.6	3.7	3.1	2.8	2.6	2.0	1.6	1.4	1.4	1.2
85°	1.4	1.2	1.2	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.2	0.2	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°	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4
2.5°	756.4	756.7	756.9	756.9	757.3	757.5	757.5	757.8	758.1	758.3	758.3
5°	755.0	755.0	755.0	755.3	755.3	755.3	755.3	755.9	755.9	756.1	756.4
7.5°	752.1	752.1	752.1	752.1	751.9	752.1	751.9	751.9	752.4	752.7	753.0
10°	747.6	747.2	747.2	747.0	747.0	747.0	747.2	747.6	747.8	748.3	749.1
12.5°	740.5	740.2	740.2	739.9	739.9	740.2	740.5	741.0	742.1	742.8	744.0
15°	729.1	728.8	729.1	729.4	730.0	730.9	731.7	732.5	734.3	735.7	737.2
17.5°	712.7	713.0	713.3	713.8	714.7	715.8	718.0	720.4	722.4	724.7	726.9
20°	690.0	691.1	691.3	693.3	693.9	696.5	699.0	702.4	705.6	708.5	711.5
22.5°	662.7	663.5	664.6	666.9	668.3	671.8	674.9	678.8	682.2	685.9	690.5
25°	631.8	632.0	635.4	635.4	638.8	641.6	645.3	649.6	654.8	659.6	662.7
27.5°	596.5	597.9	600.5	601.7	604.1	608.7	611.8	616.8	622.1	626.3	629.7
30°	559.6	560.7	565.0	565.6	567.6	571.5	575.7	580.5	584.6	589.4	592.4
32.5°	520.6	523.8	526.4	528.2	528.8	534.8	537.1	540.5	545.0	549.9	553.1
35°	482.9	484.3	488.1	489.1	490.9	494.3	498.7	501.6	503.8	507.1	510.6
37.5°	442.8	447.1	447.9	451.3	451.9	455.0	457.3	460.8	463.6	466.4	466.9
40°	405.7	407.1	410.1	410.9	411.6	415.8	418.7	419.5	421.0	423.5	426.9
42.5°	367.8	369.2	372.6	371.8	374.4	376.4	377.8	381.1	382.7	383.5	383.5
45°	330.6	331.2	333.4	334.7	336.1	337.1	339.7	341.4	342.0	344.5	345.3
47.5°	295.1	295.7	297.3	299.4	298.8	300.2	303.1	303.9	304.1	306.0	306.8
50°	260.2	261.6	263.9	263.3	265.0	265.8	268.4	269.0	269.0	269.3	269.5
52.5°	227.4	228.7	229.3	229.8	230.7	232.1	233.1	232.7	233.8	235.0	234.1
55°	195.2	196.0	197.4	197.9	197.9	198.3	197.6	200.3	199.1	198.9	199.1
57.5°	165.5	164.5	164.2	165.5	166.1	165.9	165.1	166.1	166.1	165.5	164.7
60°	136.9	136.0	135.8	136.0	134.9	134.1	134.7	134.1	132.6	132.0	132.4
62.5°	110.8	110.0	107.6	107.6	107.1	106.8	104.6	104.8	103.8	101.9	102.5
65°	86.6	84.3	83.2	82.9	81.0	79.3	78.7	76.7	75.1	74.7	75.1
67.5°	65.0	62.6	60.5	59.7	58.5	57.1	55.1	53.4	53.9	53.7	54.8
70°	45.2	43.4	41.4	40.0	40.6	39.0	37.7	37.7	38.1	38.3	39.0
72.5°	30.1	27.9	27.1	26.0	25.6	24.4	25.0	25.0	24.6	25.0	24.4
75°	17.0	16.0	15.1	14.7	14.1	14.1	14.1	14.1	13.9	13.7	13.7
77.5°	7.6	7.1	6.8	6.5	6.5	6.5	6.2	6.0	6.0	6.0	5.7
80°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	1.2	1.2	1.4	1.4	1.4	1.2	1.4	1.4	1.2	1.2	1.4
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
87.5°	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	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 EX4C159030 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	756.4	756.4	756.4	756.4	756.4	756.4	756.4	756.4
2.5°	758.7	758.9	758.9	758.9	759.3	759.3	759.3	759.3
5°	756.7	756.9	756.9	756.9	757.3	757.3	757.3	757.3
7.5°	753.2	753.5	753.5	753.8	753.8	754.2	754.2	754.5
10°	749.3	749.9	750.1	750.5	750.7	751.0	751.0	751.3
12.5°	745.0	745.6	745.8	746.4	747.0	747.2	747.6	747.8
15°	738.8	739.9	740.5	740.7	741.9	742.5	742.8	743.1
17.5°	728.8	731.1	731.9	732.5	733.7	734.7	735.7	735.9
20°	714.7	717.1	718.3	719.8	721.4	722.8	723.4	724.0
22.5°	694.7	697.6	699.3	701.1	702.4	703.8	706.0	705.2
25°	666.4	671.1	673.2	674.0	677.2	678.8	680.0	678.8
27.5°	634.5	637.4	639.1	641.0	643.3	645.1	645.7	647.3
30°	596.2	601.1	600.8	602.7	605.5	607.4	607.8	609.3
32.5°	556.5	558.7	560.4	560.2	561.3	564.3	563.3	565.8
35°	514.1	514.3	517.2	516.9	519.2	519.2	519.2	520.9
37.5°	468.9	472.3	471.0	474.3	473.2	474.1	474.1	474.6
40°	427.7	429.0	429.0	430.1	430.9	430.1	430.6	432.0
42.5°	385.1	386.3	386.5	385.9	386.9	389.4	387.3	389.2
45°	345.3	346.2	347.4	346.6	348.0	347.2	348.0	347.4
47.5°	307.8	307.6	307.4	309.6	307.6	307.8	309.0	307.0
50°	269.5	271.3	270.1	270.9	271.5	271.5	270.7	270.7
52.5°	235.5	235.2	234.4	235.2	234.6	235.0	235.5	235.0
55°	200.3	201.4	200.8	200.6	200.8	200.8	202.5	200.3
57.5°	165.5	165.1	165.9	167.9	165.9	167.3	168.1	168.3
60°	132.6	132.6	134.4	133.5	135.2	136.6	137.8	137.2
62.5°	101.1	102.5	103.1	103.3	105.2	106.2	106.2	106.0
65°	75.1	76.9	76.9	78.1	78.7	78.7	79.3	80.4
67.5°	55.3	55.3	55.7	56.3	55.9	55.9	56.6	56.8
70°	38.6	38.1	39.0	38.6	38.6	38.3	38.6	38.6
72.5°	24.4	24.4	24.6	24.4	23.8	24.2	24.2	24.6
75°	13.1	13.7	13.1	13.1	13.3	12.7	13.1	13.3
77.5°	5.4	5.4	5.4	5.4	5.4	5.1	5.1	5.1
80°	2.6	2.6	2.6	2.6	2.6	2.6	2.2	2.2
82.5°	1.2	1.4	1.2	1.4	1.2	1.2	1.2	1.2
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
87.5°	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.2
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)