

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: P856908

Luminaire Tested: **LX4C15D010 EX4C159027 4LBLWW***

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P856908
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 EX4C159027 4LBLWW*
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

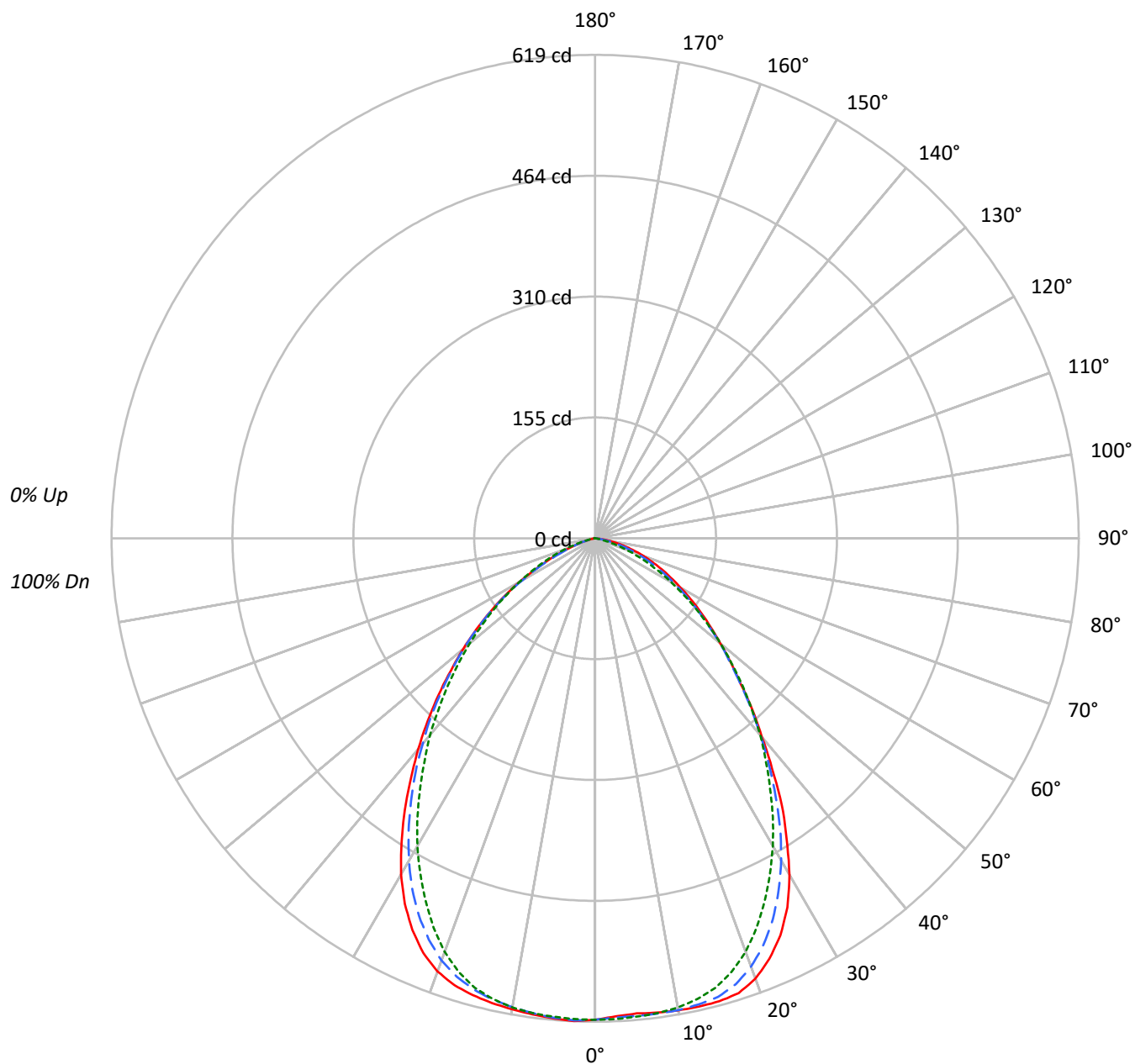
Lumens per Lamp: N/A
Luminaire Lumens: 1182.0 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89		
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78		
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68		
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60		
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54		
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48		
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43		
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39		
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36		
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	75739	75739	75739
5°	75313	75831	76115
10°	76571	76097	76396
15°	78068	75765	77025
20°	78456	73645	77148
25°	76046	69539	75002
30°	70575	64532	70447
35°	62495	58536	63680
40°	53276	52731	56468
45°	45781	46302	49186
50°	39964	40041	42162
55°	35298	33820	34956
60°	30935	27593	27470
65°	27384	21395	19041
70°	23384	14727	11315
75°	18892	7927	5174
80°	12947	1981	1344
85°	3947	705	705



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	5.0
10°-20°	169.6	14.4
20°-30°	245.1	20.7
30°-40°	253.4	21.4
40°-50°	209.4	17.7
50°-60°	144.5	12.2
60°-70°	75.6	6.4
70°-80°	23.8	2.0
80°-90°	2.0	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°	473.3	40.0
0°-40°	726.7	61.5
0°-60°	1080.5	91.4
0°-90°	1182.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1182.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	616	616	616	616	616	
5°	611	614	615	616	617	58
15°	614	608	596	598	606	173
25°	561	538	513	534	553	256
35°	417	403	390	411	425	259
45°	264	262	266	279	283	205
55°	165	160	158	162	163	148
65°	94	85	74	61	66	93
75°	40	31	17	11	11	43
85°	3	1	0	0	0	6
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°	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5
2.5°	612.6	612.8	612.8	613.3	613.3	613.3	613.5	613.5	613.8	614.0	614.2
5°	610.7	610.7	611.2	611.4	611.9	612.1	612.6	612.8	613.3	613.5	613.8
7.5°	612.6	612.6	612.8	613.1	613.1	613.3	613.3	613.5	613.8	614.0	614.0
10°	613.8	613.8	613.8	613.8	614.0	614.0	614.0	613.8	613.8	613.8	613.5
12.5°	614.2	614.2	614.0	613.8	614.0	613.8	613.8	613.1	612.6	612.1	611.4
15°	613.8	613.8	613.5	613.3	613.1	612.6	612.4	611.2	610.3	608.9	608.0
17.5°	610.7	610.3	609.8	609.4	608.4	607.7	607.3	605.2	603.6	601.2	598.7
20°	600.1	599.6	598.9	597.8	596.6	595.7	594.3	591.3	589.7	586.2	583.7
22.5°	582.7	582.3	582.5	580.4	578.1	576.7	575.8	573.2	570.5	566.1	563.3
25°	561.0	559.6	559.6	556.3	555.2	554.3	553.1	550.1	545.9	542.0	538.3
27.5°	532.7	530.9	529.9	529.5	526.7	524.6	523.0	520.7	517.2	513.7	508.6
30°	497.5	497.3	496.1	494.1	492.0	491.0	489.2	485.3	482.0	479.5	476.2
32.5°	456.1	455.9	455.9	455.9	454.5	454.2	451.5	449.4	446.8	442.9	440.8
35°	416.7	416.5	416.7	413.3	412.3	411.6	411.4	410.0	406.5	404.7	402.8
37.5°	372.3	373.0	372.5	371.6	372.7	370.7	372.3	369.3	367.9	367.4	365.3
40°	332.2	334.1	332.2	332.5	333.6	331.5	331.5	331.1	330.1	329.7	329.2
42.5°	298.0	295.6	297.0	295.9	297.0	296.3	295.2	295.9	296.1	295.2	295.0
45°	263.5	263.9	264.4	263.7	263.7	263.0	264.9	263.7	263.7	263.9	262.3
47.5°	235.5	234.8	235.2	234.8	235.0	234.5	235.0	235.2	234.8	234.8	233.4
50°	209.1	208.6	210.2	208.8	208.8	208.6	208.8	208.4	207.7	207.7	208.1
52.5°	186.1	185.2	185.0	186.1	184.5	184.5	184.8	184.3	183.4	182.9	181.7
55°	164.8	164.6	164.8	163.9	163.5	163.5	162.3	161.8	161.6	160.4	159.7
57.5°	144.9	144.2	144.5	144.2	143.3	143.1	142.2	142.2	141.2	140.3	139.1
60°	125.9	125.9	126.6	125.7	125.0	124.6	124.1	123.6	122.0	120.4	119.0
62.5°	109.0	109.3	109.0	108.3	107.9	107.4	107.0	105.6	104.2	103.3	101.6
65°	94.2	94.0	93.3	92.8	91.7	91.7	90.8	90.1	88.4	87.1	85.4
67.5°	78.9	78.5	78.5	78.5	77.1	76.9	76.4	75.0	73.6	71.8	70.4
70°	65.1	65.5	64.8	64.1	63.4	63.2	62.5	61.1	59.5	57.6	56.5
72.5°	51.9	52.3	51.6	51.4	50.0	49.5	49.3	48.2	46.3	45.1	43.3
75°	39.8	40.1	39.6	39.1	38.2	38.0	36.8	35.9	34.7	32.9	31.3
77.5°	28.7	28.2	28.2	27.3	26.4	26.4	26.2	24.8	23.2	21.8	20.4
80°	18.3	18.1	17.4	16.9	16.2	16.0	15.7	14.6	13.4	12.5	11.6
82.5°	9.3	9.0	8.8	8.6	8.1	7.6	7.9	6.9	6.5	5.6	4.9
85°	2.8	3.0	3.0	2.8	2.5	2.5	2.5	2.3	1.9	1.6	1.4
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°	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5
2.5°	614.4	614.7	614.9	615.1	615.1	615.4	615.6	615.8	616.1	616.1	616.3
5°	614.0	614.4	614.4	614.7	614.7	614.7	614.9	614.9	614.9	614.9	615.1
7.5°	614.2	614.2	614.2	614.0	614.0	613.8	613.8	613.8	613.3	613.3	613.3
10°	613.1	612.8	612.6	612.1	611.9	611.7	611.2	610.7	610.3	610.0	609.6
12.5°	610.7	609.8	608.9	608.0	607.5	607.3	606.3	605.6	605.0	604.3	603.8
15°	606.1	604.7	603.1	601.2	600.8	600.3	598.7	597.3	596.4	595.7	594.5
17.5°	596.9	594.1	592.2	589.4	588.3	587.8	585.3	583.9	582.3	581.8	580.9
20°	580.4	577.9	574.4	571.8	570.5	569.1	567.0	565.1	563.3	563.3	562.1
22.5°	559.8	556.6	552.2	548.9	548.7	545.9	544.1	542.0	541.3	539.9	539.9
25°	533.9	531.1	526.2	523.5	522.1	521.4	518.4	515.6	514.2	513.0	514.0
27.5°	505.2	501.0	497.3	493.8	492.7	491.3	488.5	487.3	484.8	484.6	484.3
30°	472.3	468.1	464.4	462.8	460.5	459.3	457.2	455.9	454.9	454.9	454.5
32.5°	437.8	434.1	432.2	428.8	427.6	426.0	424.6	423.2	423.7	423.2	423.4
35°	400.5	399.6	396.1	394.0	394.0	393.8	391.5	390.6	390.1	390.3	391.5
37.5°	365.1	362.3	360.0	358.6	359.8	358.4	358.2	358.2	359.5	358.6	360.5
40°	327.4	327.1	326.2	326.7	326.9	325.3	325.7	326.0	326.9	328.8	329.0
42.5°	294.5	294.3	294.3	294.3	293.8	292.9	293.8	295.4	295.2	296.6	297.7
45°	262.8	262.3	263.2	262.5	263.9	264.4	263.7	264.2	265.5	266.5	268.3
47.5°	233.8	233.8	234.1	234.5	233.1	234.3	234.8	235.7	236.4	236.8	237.8
50°	207.0	207.0	206.5	206.5	206.5	207.2	206.3	207.4	207.7	209.5	210.7
52.5°	182.2	181.0	181.7	181.3	180.4	179.9	180.4	180.6	182.0	182.4	183.8
55°	158.6	158.6	156.7	156.3	157.0	156.7	156.5	156.5	157.2	157.9	159.1
57.5°	137.8	136.4	135.0	134.7	134.0	134.3	134.3	134.0	133.6	133.8	134.0
60°	118.1	117.1	115.1	115.1	114.8	114.6	113.4	113.2	112.1	112.3	111.4
62.5°	100.0	99.6	96.8	95.8	95.8	95.2	94.0	93.8	92.1	92.1	91.2
65°	83.8	82.4	80.8	79.2	79.2	78.3	77.6	75.5	74.3	73.6	72.2
67.5°	69.0	66.9	65.3	63.9	63.0	62.7	61.1	59.7	57.9	56.7	54.6
70°	54.6	53.0	51.4	50.0	49.1	48.2	46.5	44.5	43.1	41.0	39.6
72.5°	41.2	39.8	38.4	36.6	35.4	34.7	33.1	31.3	28.9	27.6	25.7
75°	29.6	28.0	26.2	24.5	23.8	23.2	21.3	19.9	18.3	16.7	14.8
77.5°	19.2	17.4	16.0	14.1	13.9	13.4	11.6	10.2	9.0	8.1	6.9
80°	10.2	9.3	8.1	6.9	6.5	5.8	4.9	4.2	3.5	2.8	2.3
82.5°	4.4	3.7	3.0	2.5	2.3	2.1	1.6	1.4	1.2	1.2	0.9
85°	1.2	0.9	0.9	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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°	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5
2.5°	616.5	616.8	617.0	617.0	617.2	617.5	617.5	617.7	617.9	618.1	618.1
5°	615.4	615.4	615.4	615.6	615.6	615.6	615.6	616.1	616.1	616.3	616.5
7.5°	613.1	613.1	613.1	613.1	612.8	613.1	612.8	612.8	613.3	613.5	613.8
10°	609.4	609.1	609.1	608.9	608.9	608.9	609.1	609.4	609.6	609.8	610.5
12.5°	603.6	603.3	603.3	603.1	603.1	603.3	603.6	604.0	605.0	605.4	606.3
15°	594.3	594.1	594.3	594.5	595.0	595.7	596.4	597.1	598.5	599.6	600.8
17.5°	580.9	581.1	581.3	581.8	582.5	583.4	585.3	587.1	588.7	590.6	592.5
20°	562.4	563.3	563.5	565.1	565.6	567.7	569.8	572.5	575.1	577.4	579.9
22.5°	540.1	540.8	541.7	543.6	544.8	547.5	550.1	553.3	556.1	559.1	562.8
25°	514.9	515.1	517.9	517.9	520.7	523.0	526.0	529.5	533.6	537.6	540.1
27.5°	486.2	487.3	489.4	490.4	492.4	496.1	498.7	502.9	507.0	510.5	513.3
30°	456.1	457.0	460.5	461.0	462.6	465.8	469.3	473.2	476.5	480.4	482.9
32.5°	424.4	426.9	429.0	430.6	431.1	435.9	437.8	440.6	444.3	448.2	450.8
35°	393.6	394.7	397.7	398.7	400.1	402.8	406.5	408.9	410.7	413.3	416.3
37.5°	360.9	364.4	365.1	367.9	368.3	370.9	372.7	375.5	377.8	380.2	380.6
40°	330.6	331.8	334.3	335.0	335.5	338.9	341.3	342.0	343.1	345.2	348.0
42.5°	299.8	301.0	303.8	303.1	305.1	306.8	307.9	310.7	311.9	312.5	312.5
45°	269.5	269.9	271.8	272.7	273.9	274.8	276.9	278.3	278.7	280.8	281.5
47.5°	240.5	241.0	242.4	244.0	243.6	244.7	247.0	247.7	248.0	249.3	250.0
50°	212.1	213.2	215.1	214.6	216.0	216.7	218.8	219.2	219.2	219.5	219.7
52.5°	185.4	186.4	186.8	187.3	188.0	189.1	190.1	189.6	190.5	191.5	190.8
55°	159.1	159.7	160.9	161.4	161.4	161.6	161.1	163.2	162.3	162.1	162.3
57.5°	135.0	134.0	133.8	135.0	135.4	135.2	134.5	135.4	135.4	135.0	134.3
60°	111.6	110.9	110.7	110.9	110.0	109.3	109.7	109.3	108.1	107.7	107.9
62.5°	90.3	89.6	87.7	87.7	87.3	87.1	85.2	85.4	84.5	83.1	83.6
65°	70.6	68.8	67.8	67.6	66.0	64.6	64.1	62.5	61.1	60.9	61.1
67.5°	53.0	50.9	49.3	48.6	47.7	46.5	44.9	43.5	44.0	43.8	44.7
70°	36.8	35.4	33.8	32.6	33.1	31.7	30.8	30.8	31.0	31.3	31.7
72.5°	24.5	22.7	22.0	21.3	20.8	19.9	20.4	20.4	20.1	20.4	19.9
75°	13.9	13.0	12.3	12.0	11.6	11.6	11.6	11.6	11.3	11.1	11.1
77.5°	6.3	5.8	5.6	5.3	5.3	5.3	5.1	4.9	4.9	4.9	4.6
80°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
82.5°	0.9	0.9	1.2	1.2	1.2	0.9	1.2	1.2	0.9	0.9	1.2
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	616.5	616.5	616.5	616.5	616.5	616.5	616.5	616.5
2.5°	618.4	618.6	618.6	618.6	618.8	618.8	618.8	618.8
5°	616.8	617.0	617.0	617.0	617.2	617.2	617.2	617.2
7.5°	614.0	614.2	614.2	614.4	614.4	614.7	614.7	614.9
10°	610.7	611.2	611.4	611.7	611.9	612.1	612.1	612.4
12.5°	607.3	607.7	608.0	608.4	608.9	609.1	609.4	609.6
15°	602.2	603.1	603.6	603.8	604.7	605.2	605.4	605.6
17.5°	594.1	595.9	596.6	597.1	598.0	598.9	599.6	599.9
20°	582.5	584.6	585.5	586.7	588.1	589.2	589.7	590.1
22.5°	566.3	568.6	570.0	571.4	572.5	573.7	575.6	574.9
25°	543.1	547.1	548.7	549.4	551.9	553.3	554.3	553.3
27.5°	517.2	519.5	520.9	522.5	524.4	525.8	526.2	527.6
30°	486.0	489.9	489.7	491.3	493.6	495.0	495.4	496.6
32.5°	453.5	455.4	456.8	456.6	457.5	460.0	459.1	461.2
35°	419.0	419.3	421.6	421.4	423.2	423.2	423.2	424.6
37.5°	382.2	385.0	383.9	386.6	385.7	386.4	386.4	386.9
40°	348.7	349.6	349.6	350.5	351.2	350.5	351.0	352.1
42.5°	313.9	314.9	315.1	314.6	315.3	317.4	315.8	317.2
45°	281.5	282.2	283.1	282.5	283.6	282.9	283.6	283.1
47.5°	251.0	250.7	250.5	252.4	250.7	251.0	251.9	250.3
50°	219.7	221.1	220.2	220.9	221.3	221.3	220.6	220.6
52.5°	191.9	191.7	191.0	191.7	191.2	191.5	191.9	191.5
55°	163.2	164.1	163.7	163.5	163.7	163.7	165.1	163.2
57.5°	135.0	134.5	135.2	136.8	135.2	136.4	137.1	137.3
60°	108.1	108.1	109.5	108.8	110.2	111.4	112.3	111.8
62.5°	82.4	83.6	84.0	84.3	85.7	86.6	86.6	86.4
65°	61.1	62.7	62.7	63.7	64.1	64.1	64.6	65.5
67.5°	45.1	45.1	45.4	45.8	45.6	45.6	46.1	46.3
70°	31.5	31.0	31.7	31.5	31.5	31.3	31.5	31.5
72.5°	19.9	19.9	20.1	19.9	19.4	19.7	19.7	20.1
75°	10.6	11.1	10.6	10.6	10.9	10.4	10.6	10.9
77.5°	4.4	4.4	4.4	4.4	4.4	4.2	4.2	4.2
80°	2.1	2.1	2.1	2.1	2.1	2.1	1.9	1.9
82.5°	0.9	1.2	0.9	1.2	0.9	0.9	0.9	0.9
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)