

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: P856978

Luminaire Tested: **LX4C15D010 EX4C159040 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P856978
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)
Test Lab: INNOVATION CENTER
Issue Date: 2/14/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C15D010 EX4C159040 4LBLWWH
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

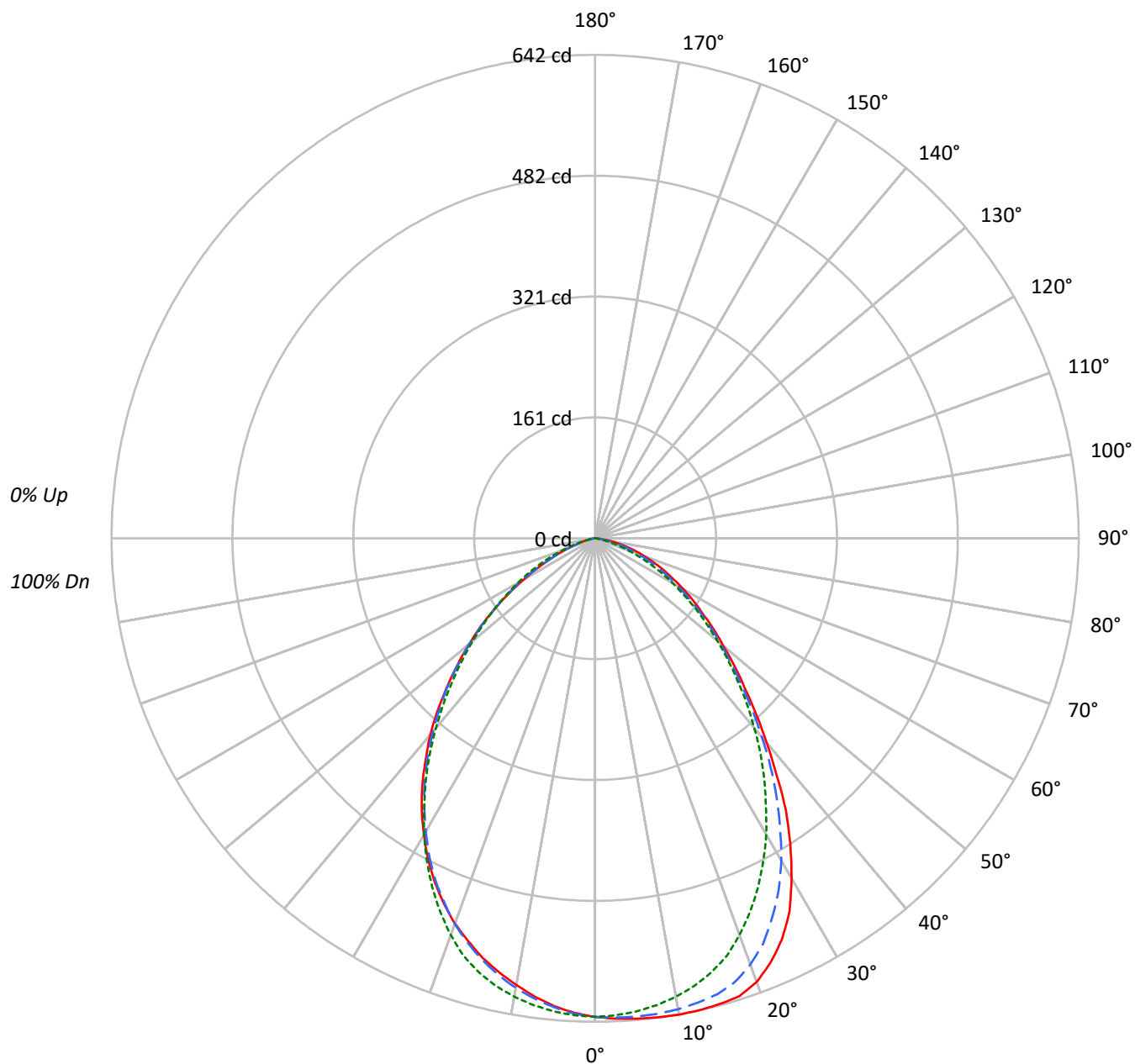
Lumens per Lamp: N/A
Luminaire Lumens: 1198.0 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	108	105	102	99	101	98	96	97	95	93	94	92	90	88		
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77		
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68		
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60		
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53		
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47		
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43		
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39		
9	62	50	43	38	61	50	42	37	49	42	37	47	41	37	47	41	37	35		
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	78098	78098	78098
5°	78964	77767	76916
10°	80126	77107	75149
15°	81438	75880	73362
20°	81960	73292	71187
25°	79611	69336	68278
30°	73979	64447	64475
35°	66230	58746	59991
40°	56692	52667	54575
45°	48804	46424	48178
50°	42430	40423	41627
55°	37333	34763	34463
60°	33220	29018	26733
65°	29128	23227	19331
70°	25036	16415	13075
75°	20316	9493	7642
80°	14503	4174	3820
85°	5497	1692	1692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.9	5.0
10°-20°	169.6	14.2
20°-30°	242.2	20.2
30°-40°	253.3	21.1
40°-50°	212.3	17.7
50°-60°	148.6	12.4
60°-70°	80.9	6.8
70°-80°	28.1	2.3
80°-90°	3.2	0.3
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°	471.7	39.4
0°-40°	725.0	60.5
0°-60°	1085.8	90.6
0°-90°	1198.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1198.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	636	636	636	636	636	
5°	640	637	631	625	624	61
15°	640	627	597	580	577	181
25°	587	556	512	502	504	268
35°	442	420	392	395	400	274
45°	281	275	267	276	277	218
55°	174	168	162	162	161	157
65°	100	91	80	67	66	100
75°	43	35	20	16	16	46
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°	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7
2.5°	638.6	637.9	638.1	638.1	638.1	637.9	638.1	637.9	637.9	637.6	637.2
5°	640.3	639.8	639.8	639.8	639.6	639.4	639.4	639.1	638.6	638.4	637.4
7.5°	641.6	641.1	641.1	640.8	640.6	640.3	640.1	639.4	638.6	638.1	636.9
10°	642.3	641.6	641.6	641.1	640.6	640.3	639.8	638.9	637.9	636.7	635.0
12.5°	641.8	641.1	640.8	640.3	639.4	638.9	638.4	637.2	635.4	633.7	631.5
15°	640.3	639.8	639.4	638.6	637.4	636.7	636.2	634.2	632.0	629.6	626.9
17.5°	637.4	636.7	635.7	634.7	633.0	632.3	631.0	628.6	625.4	622.0	617.8
20°	626.9	626.4	625.4	623.7	621.0	620.0	618.3	615.2	611.0	606.8	602.4
22.5°	609.5	608.8	607.3	605.9	603.4	601.7	600.2	595.8	591.2	586.8	582.6
25°	587.3	586.5	584.6	582.6	580.2	577.3	575.8	572.4	567.7	562.1	556.0
27.5°	558.7	556.2	555.5	553.3	549.6	548.6	546.4	542.0	537.6	532.8	527.6
30°	521.5	521.5	520.0	519.1	515.6	514.7	512.2	507.6	505.1	498.3	494.4
32.5°	482.1	481.7	480.4	479.7	477.7	476.0	473.6	471.1	465.8	462.3	457.0
35°	441.6	438.6	439.1	437.6	436.4	434.5	434.2	431.5	426.6	424.7	419.8
37.5°	395.3	394.1	395.8	393.6	392.4	392.7	390.7	389.0	387.0	383.6	382.6
40°	353.5	354.5	354.3	352.3	353.3	352.1	350.1	348.4	347.4	345.2	344.5
42.5°	316.1	314.7	314.2	314.2	314.4	314.4	313.4	312.2	312.2	310.0	307.8
45°	280.9	280.9	280.4	281.9	279.7	279.7	279.0	278.7	277.7	277.3	274.6
47.5°	250.6	250.4	250.1	249.9	249.6	249.6	248.2	246.9	246.7	245.2	243.8
50°	222.0	223.5	223.0	221.8	221.3	221.5	220.5	219.8	219.6	217.1	217.4
52.5°	198.0	197.8	198.3	197.6	196.3	196.6	195.6	194.6	193.6	192.4	191.4
55°	174.3	175.5	175.1	174.3	174.1	173.6	172.9	171.6	171.4	168.7	168.5
57.5°	154.5	154.3	153.8	152.6	152.3	151.6	151.6	150.6	149.1	147.7	146.5
60°	135.2	135.2	134.5	134.2	133.2	133.0	132.8	131.8	130.1	128.8	126.9
62.5°	116.6	117.1	116.6	115.9	115.2	114.2	113.7	113.0	111.5	110.3	108.6
65°	100.2	100.0	99.8	98.8	98.5	97.6	97.3	95.8	94.4	93.4	91.4
67.5°	84.6	83.9	83.9	83.4	82.9	82.2	81.7	80.2	78.5	77.5	75.5
70°	69.7	69.2	69.2	69.2	68.0	67.2	67.0	66.3	63.8	62.8	60.9
72.5°	56.0	55.7	55.5	54.8	54.0	54.0	53.1	51.6	50.4	49.1	47.7
75°	42.8	43.3	42.8	41.8	41.6	41.1	40.3	39.1	37.9	36.4	34.7
77.5°	31.3	30.8	30.3	30.3	29.8	28.9	28.6	27.6	26.2	25.2	23.5
80°	20.5	20.3	19.8	19.3	19.1	18.8	18.6	17.6	16.1	15.4	13.9
82.5°	11.2	11.0	11.0	10.8	10.0	10.0	9.8	8.8	8.1	7.6	6.8
85°	3.9	3.9	3.9	3.7	3.7	3.7	3.4	3.2	2.9	2.7	2.2
87.5°	0.5	0.2	0.5	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2
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°	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7
2.5°	636.7	636.2	635.9	635.7	635.4	635.2	635.0	634.5	634.2	634.0	633.5
5°	636.7	635.7	635.2	634.5	634.0	633.5	632.8	632.0	631.3	630.6	629.8
7.5°	635.7	634.2	633.2	631.8	631.3	630.6	629.1	628.1	626.9	625.4	623.7
10°	633.2	631.5	629.6	627.6	626.9	625.7	623.7	622.0	620.0	618.1	616.4
12.5°	629.3	626.6	624.2	621.5	620.0	618.8	616.1	613.7	611.2	609.0	606.1
15°	623.5	620.3	617.1	613.4	611.7	610.3	606.3	603.4	599.5	596.6	593.6
17.5°	613.9	609.0	605.1	600.5	598.0	596.3	592.9	588.3	584.6	581.4	578.0
20°	597.5	592.9	587.5	582.4	579.7	577.5	572.6	567.7	564.1	560.6	557.0
22.5°	576.0	570.2	566.3	559.9	557.7	555.0	549.1	544.7	540.6	537.2	533.7
25°	549.9	544.7	539.4	533.5	530.8	527.6	522.7	518.1	515.4	511.5	507.3
27.5°	519.8	515.6	509.0	503.9	501.2	498.8	494.1	490.0	486.1	483.4	479.5
30°	488.0	483.1	477.3	471.9	470.4	467.5	463.3	460.1	456.0	454.3	452.6
32.5°	453.0	447.4	443.0	439.6	436.7	434.2	432.0	426.9	426.2	421.8	421.3
35°	414.9	412.5	408.3	405.4	402.9	401.2	397.5	395.1	392.4	391.7	390.0
37.5°	379.0	376.0	372.1	369.4	367.7	367.5	364.8	363.3	361.4	360.4	358.4
40°	341.3	340.1	336.7	336.2	333.5	333.2	331.8	330.1	328.4	328.4	328.6
42.5°	306.6	305.1	303.7	302.0	300.5	300.5	299.8	299.3	298.8	298.0	299.3
45°	274.1	272.1	271.1	269.4	270.2	268.7	268.2	268.2	267.5	267.2	268.9
47.5°	243.8	241.6	240.6	240.1	240.1	240.3	238.1	238.9	238.6	239.1	239.8
50°	216.1	214.2	212.7	212.7	213.0	212.0	211.0	211.7	211.0	211.5	213.2
52.5°	190.5	188.5	187.8	187.8	186.3	186.1	186.5	185.6	185.8	186.1	187.0
55°	166.7	165.5	164.3	163.1	163.3	162.8	161.9	161.6	162.1	162.3	163.6
57.5°	145.5	143.8	142.1	141.6	141.1	141.1	139.9	139.6	140.1	138.9	138.9
60°	125.2	124.2	122.0	121.3	121.3	120.0	119.1	119.6	118.3	118.1	118.3
62.5°	106.4	105.6	104.2	102.7	102.2	101.7	100.5	100.0	99.5	98.5	97.1
65°	90.0	88.3	86.6	85.6	84.8	83.6	82.9	81.9	80.4	79.9	78.5
67.5°	73.6	71.9	70.2	69.4	68.7	68.0	66.7	65.5	63.8	61.9	60.1
70°	59.2	57.0	56.0	54.0	53.5	52.6	50.9	49.6	47.9	45.7	44.0
72.5°	45.2	43.8	42.3	40.6	39.4	38.6	37.2	35.2	33.3	32.0	30.3
75°	32.5	31.8	29.8	27.9	27.4	26.4	24.7	23.5	22.0	20.0	18.6
77.5°	22.0	20.5	19.3	17.6	17.1	16.1	15.2	13.9	13.0	11.7	10.8
80°	13.0	11.7	11.0	9.8	9.3	8.8	8.1	7.1	6.4	5.9	5.6
82.5°	6.4	5.4	5.1	4.4	4.2	3.9	3.4	3.2	2.7	2.7	2.7
85°	2.2	1.7	1.7	1.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2
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°	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7
2.5°	633.2	633.0	632.8	632.5	632.5	632.3	632.3	632.0	632.0	631.8	631.8
5°	628.8	628.1	627.6	627.1	627.1	626.4	625.9	625.4	625.2	625.2	624.7
7.5°	622.7	621.8	620.8	620.0	619.8	618.6	617.6	617.6	616.6	616.1	615.6
10°	614.7	612.9	611.5	610.7	609.8	609.0	607.8	607.1	606.3	605.1	604.9
12.5°	603.7	602.4	600.2	599.3	598.8	597.3	595.3	594.4	594.1	593.1	592.4
15°	591.2	588.5	586.5	585.3	585.3	582.9	581.9	580.4	579.5	578.7	578.5
17.5°	575.1	572.4	570.4	568.7	568.2	566.3	564.8	564.3	563.1	563.6	562.3
20°	554.3	552.1	550.6	548.4	548.4	547.2	546.7	545.5	545.0	544.5	545.0
22.5°	532.0	529.3	526.9	526.6	526.6	524.9	524.7	524.4	523.5	524.2	524.0
25°	505.9	503.9	502.4	502.2	502.2	501.2	500.2	500.7	501.5	501.2	501.9
27.5°	478.7	476.8	476.3	476.0	475.5	475.3	475.8	475.8	476.5	477.5	478.5
30°	449.4	448.9	448.2	447.9	447.4	448.6	449.1	449.9	449.6	451.1	452.1
32.5°	420.0	419.1	418.8	419.3	420.0	419.8	421.3	421.8	422.2	424.0	424.7
35°	390.5	390.2	389.7	389.7	390.0	391.9	391.9	393.6	394.6	395.1	397.1
37.5°	358.7	359.7	360.1	360.9	361.1	361.9	362.3	364.1	365.0	366.0	367.0
40°	329.6	329.1	331.3	329.8	330.3	332.5	333.5	333.2	334.7	336.2	337.2
42.5°	298.5	299.3	299.8	300.2	301.5	301.7	302.9	304.6	305.1	306.8	307.3
45°	268.5	268.7	269.7	270.7	271.4	273.3	273.8	274.6	276.0	276.0	276.8
47.5°	240.1	241.1	241.1	242.5	243.8	243.5	245.2	245.7	245.5	246.7	247.2
50°	213.0	214.4	214.2	215.2	215.6	215.9	217.4	217.8	216.9	218.1	218.3
52.5°	187.0	187.8	188.8	189.0	188.5	189.7	189.2	190.2	190.0	191.0	190.0
55°	163.3	163.1	163.1	163.6	163.1	163.6	164.1	163.1	162.3	163.3	163.1
57.5°	139.6	139.6	139.1	139.9	139.1	138.4	138.1	137.4	136.7	136.7	136.4
60°	117.4	116.9	115.9	115.6	115.6	114.4	113.9	113.0	113.0	112.0	111.0
62.5°	96.6	95.4	94.6	94.6	94.1	92.9	90.7	89.2	88.8	87.3	87.0
65°	77.0	75.8	75.1	73.6	72.4	71.9	69.7	68.0	67.2	65.8	66.0
67.5°	59.2	57.2	55.0	54.0	53.3	51.6	50.9	49.6	48.9	48.9	48.9
70°	42.5	40.8	38.6	37.9	37.4	35.9	35.2	35.0	35.7	35.5	35.7
72.5°	28.6	26.9	25.9	25.4	24.9	24.2	24.7	24.9	24.4	24.7	24.9
75°	17.4	16.9	16.1	15.9	15.9	16.1	15.9	15.9	16.1	16.1	16.4
77.5°	10.0	9.5	9.5	9.3	9.8	9.5	9.5	9.5	9.8	9.8	9.8
80°	5.4	5.4	5.4	5.4	5.6	5.4	5.6	5.6	5.6	5.6	5.6
82.5°	2.7	2.7	2.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.7
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	0.2	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2
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°	635.7	635.7	635.7	635.7	635.7	635.7	635.7	635.7
2.5°	631.3	631.3	631.3	630.8	631.0	631.0	630.8	630.8
5°	624.4	624.2	623.7	623.7	623.2	623.7	623.5	623.7
7.5°	615.2	615.2	614.4	614.4	614.2	613.9	613.7	613.9
10°	604.1	604.1	603.7	603.4	603.7	602.7	602.7	602.4
12.5°	591.9	591.4	590.9	591.2	590.9	590.2	590.0	590.2
15°	577.7	577.0	577.3	576.5	576.5	576.3	576.8	576.8
17.5°	562.1	561.6	561.1	561.4	560.9	561.1	560.9	560.6
20°	544.7	544.5	544.5	543.5	543.8	543.5	543.8	544.5
22.5°	524.7	524.4	524.7	524.0	524.4	524.4	525.2	525.2
25°	502.7	502.4	502.9	503.2	503.4	504.1	503.4	503.7
27.5°	478.2	479.0	479.7	479.9	480.9	480.2	479.7	480.4
30°	453.5	453.5	453.3	454.3	455.0	455.7	454.5	454.5
32.5°	425.2	426.4	426.4	426.6	427.4	427.4	427.4	428.4
35°	398.0	398.8	399.0	398.0	398.5	398.3	400.0	400.0
37.5°	367.7	367.7	368.0	369.7	369.7	368.9	369.4	369.4
40°	338.9	339.1	338.1	338.6	339.8	339.4	339.8	340.3
42.5°	307.3	309.0	308.1	308.6	308.3	308.6	308.8	308.8
45°	277.3	277.7	277.7	278.0	278.5	279.0	277.5	277.3
47.5°	247.9	248.2	248.9	247.7	249.1	247.7	249.1	247.4
50°	218.3	219.3	218.6	219.1	218.3	218.3	218.1	217.8
52.5°	190.2	190.0	190.0	189.7	189.7	190.2	189.7	190.5
55°	162.1	162.3	161.9	161.6	161.4	162.1	161.4	160.9
57.5°	135.5	135.9	135.0	135.5	133.7	134.5	134.7	135.0
60°	110.8	110.0	110.0	109.0	109.0	109.8	108.8	108.8
62.5°	85.8	86.3	85.6	86.6	86.6	87.5	87.0	87.5
65°	65.8	66.0	66.3	66.3	66.3	67.7	67.2	66.5
67.5°	49.6	49.9	50.1	49.9	50.6	50.1	50.1	50.4
70°	35.9	36.2	36.4	36.4	36.2	36.4	36.4	36.4
72.5°	24.9	25.2	24.9	25.2	25.4	25.2	25.2	25.4
75°	16.4	16.4	16.1	16.1	16.1	16.1	16.4	16.1
77.5°	9.5	9.8	9.5	9.8	9.8	9.8	9.8	9.8
80°	5.6	5.6	5.6	5.4	5.6	5.6	5.6	5.4
82.5°	2.9	2.9	2.7	2.7	2.9	2.9	2.9	2.9
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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)