

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: P859635

Luminaire Tested: **LX4C08D010 EX4C089027 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P859635
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: LX4C08D010 EX4C089027 4LBSWNH
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

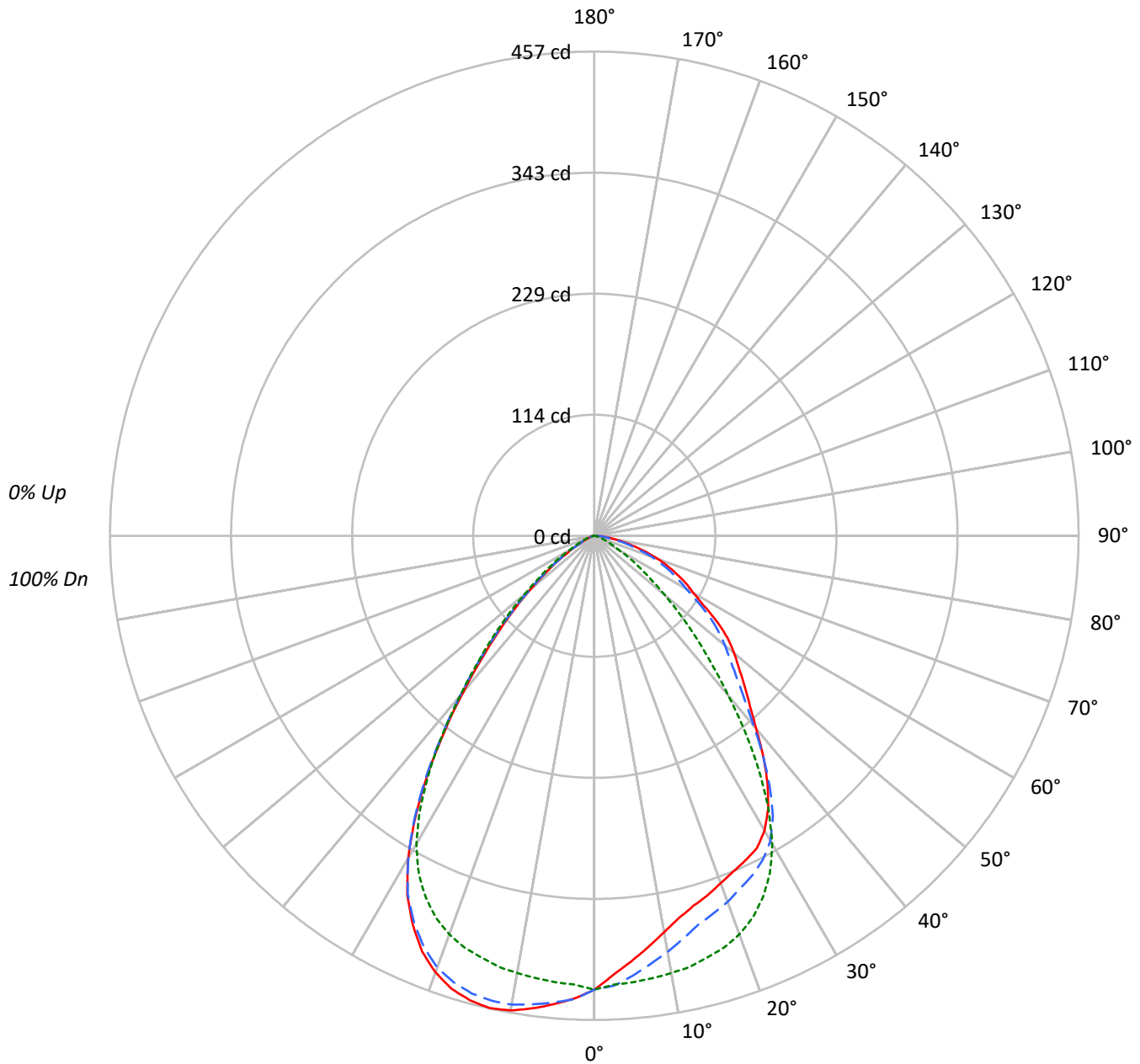
Lumens per Lamp: N/A
Luminaire Lumens: 751.0 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.9
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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89		
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79		
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70		
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62		
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56		
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50		
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46		
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42		
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38		
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	52630	52630	52630
5°	49699	52153	54743
10°	47380	52270	56748
15°	45991	52388	57718
20°	45614	52334	57316
25°	45804	51036	54926
30°	45579	47622	49807
35°	42728	40659	41064
40°	38073	31529	30808
45°	34818	23507	22065
50°	32931	16456	14870
55°	30265	11116	9339
60°	26438	6511	5160
65°	25029	4157	2878
70°	22809	2981	1796
75°	18892	2089	1329
80°	14857	1203	778
85°	13250	846	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	5.4
10°-20°	116.1	15.5
20°-30°	172.2	22.9
30°-40°	172.4	23.0
40°-50°	120.5	16.0
50°-60°	71.7	9.5
60°-70°	37.4	5.0
70°-80°	16.6	2.2
80°-90°	3.6	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°	328.8	43.8
0°-40°	501.1	66.7
0°-60°	693.3	92.3
0°-90°	751.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	751.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	428	428	428	428	428	
5°	403	417	423	442	444	38
15°	362	380	412	447	454	102
25°	338	353	376	402	405	156
35°	285	288	271	276	274	177
45°	200	190	135	131	127	156
55°	141	132	52	45	44	125
65°	86	79	14	10	10	85
75°	40	35	4	3	3	43
85°	9	7	1	1	0	11
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°	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4
2.5°	414.6	419.6	414.6	416.3	422.9	416.8	420.1	420.1	418.5	422.4	425.1
5°	403.0	408.0	403.0	405.2	412.4	406.3	410.2	409.1	409.7	413.0	416.8
7.5°	391.4	395.3	390.9	393.7	400.3	395.3	398.6	398.6	399.2	404.1	407.5
10°	379.8	383.2	379.8	382.1	389.2	384.8	387.0	387.6	389.2	393.7	398.6
12.5°	369.4	372.1	368.8	372.1	378.2	373.8	376.5	377.1	378.7	383.7	389.2
15°	361.6	364.4	361.1	363.8	369.4	366.0	368.2	369.4	370.5	374.9	379.8
17.5°	355.6	357.8	355.0	358.3	362.7	358.9	362.2	362.2	363.8	368.2	373.8
20°	348.9	351.1	348.9	351.7	356.7	353.4	356.1	356.1	357.8	362.7	367.7
22.5°	342.9	344.0	342.9	345.1	350.0	347.3	348.9	349.5	351.1	355.6	360.0
25°	337.9	340.1	339.0	341.2	344.5	341.8	343.4	344.0	345.6	349.5	353.4
27.5°	332.4	333.5	332.4	335.1	337.9	335.7	337.3	336.8	337.9	341.2	344.5
30°	321.3	322.4	322.4	324.1	326.3	325.2	326.8	325.2	326.3	329.1	332.4
32.5°	305.3	305.9	306.4	308.1	309.7	308.1	309.2	309.2	309.2	311.4	313.6
35°	284.9	286.0	285.4	286.5	288.2	287.7	287.7	287.1	286.0	287.1	288.2
37.5°	261.7	260.0	260.0	261.7	262.8	260.6	261.7	260.6	260.6	261.1	261.1
40°	237.4	235.8	237.4	238.0	238.5	237.4	236.9	235.8	234.1	234.6	233.5
42.5°	217.0	215.9	216.4	216.4	217.0	215.9	216.4	214.2	212.6	211.4	209.8
45°	200.4	198.8	200.4	199.3	199.3	198.8	198.2	197.1	194.9	193.2	190.5
47.5°	185.0	185.0	185.5	185.5	185.5	184.4	184.4	182.2	180.0	177.8	173.9
50°	172.3	171.1	173.4	173.4	171.7	171.1	171.7	168.9	167.3	164.5	160.7
52.5°	158.4	158.4	159.0	159.0	158.4	157.3	157.9	155.7	154.0	151.3	147.4
55°	141.3	140.2	141.9	141.9	141.3	140.8	141.3	139.7	138.0	135.8	132.5
57.5°	122.0	121.5	122.6	123.1	122.0	122.0	122.6	120.9	120.4	118.1	114.8
60°	107.6	107.1	108.2	108.8	107.6	107.6	107.6	105.4	104.3	102.1	99.9
62.5°	97.7	97.2	98.3	97.7	97.2	96.6	97.2	95.0	93.9	91.7	89.4
65°	86.1	86.7	87.2	87.2	86.7	86.1	86.1	85.0	83.9	81.7	79.0
67.5°	75.1	75.1	75.6	76.2	75.6	75.6	75.6	74.0	72.9	71.2	67.9
70°	63.5	62.9	64.6	64.6	63.5	64.0	63.5	62.9	61.8	59.6	56.9
72.5°	51.3	51.3	51.9	51.9	51.3	51.3	51.3	50.8	49.1	48.0	45.3
75°	39.8	39.8	40.3	40.9	39.8	39.8	40.3	39.2	38.1	36.4	34.8
77.5°	29.8	29.3	29.8	29.8	29.3	29.3	29.3	28.7	28.2	26.5	24.8
80°	21.0	20.4	21.0	21.0	21.0	20.4	20.4	19.9	19.9	18.8	17.1
82.5°	14.3	13.8	14.3	14.3	14.3	13.8	13.8	13.8	13.2	12.7	11.6
85°	9.4	8.8	8.8	9.4	8.8	8.8	8.8	8.8	8.3	7.7	7.2
87.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	3.9	3.9	3.9	3.3
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°	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4
2.5°	422.9	421.8	425.1	424.0	424.6	421.8	426.2	424.0	426.8	424.0	429.5
5°	415.7	414.6	419.6	419.0	419.6	417.4	422.4	421.8	425.1	422.9	429.0
7.5°	408.0	406.9	412.4	413.0	414.1	411.9	418.5	418.5	421.8	421.2	427.9
10°	399.2	399.7	405.2	406.3	408.6	407.5	413.5	415.2	419.6	419.0	427.3
12.5°	390.9	390.9	398.1	400.3	401.9	401.4	408.6	410.8	415.7	416.8	424.6
15°	382.6	383.2	389.8	393.1	395.3	394.8	402.5	405.2	411.3	411.9	421.2
17.5°	376.0	375.4	382.6	385.4	388.7	388.1	396.4	399.7	405.8	407.5	416.3
20°	370.5	369.9	376.5	379.8	382.1	381.5	389.8	393.7	399.2	400.3	409.1
22.5°	363.8	362.7	369.4	372.1	374.3	373.8	381.0	383.7	389.2	390.3	398.6
25°	356.1	355.0	361.1	362.7	364.4	363.3	369.4	371.0	375.4	376.5	384.8
27.5°	347.3	344.5	349.5	349.5	350.6	348.9	353.4	355.0	358.9	358.9	366.6
30°	333.5	329.6	332.4	331.8	332.4	330.2	332.9	333.5	336.2	335.7	341.2
32.5°	314.1	308.6	310.3	308.6	307.0	303.7	307.0	305.9	308.1	305.9	310.8
35°	287.7	282.1	281.6	279.4	277.7	274.9	274.9	272.2	272.7	271.1	274.4
37.5°	258.9	251.8	250.7	246.2	243.5	240.2	240.2	238.0	235.2	234.1	236.9
40°	230.8	223.0	220.3	213.1	210.3	207.0	204.8	202.1	201.0	196.6	198.8
42.5°	206.5	198.2	192.1	184.4	181.6	176.7	173.4	170.0	168.4	163.4	165.6
45°	186.1	176.1	169.5	159.5	155.7	150.2	145.2	141.3	137.5	135.3	134.2
47.5°	168.9	158.4	149.6	138.6	132.5	127.5	120.9	117.0	112.1	109.3	107.6
50°	154.6	143.0	133.1	120.4	114.3	108.8	101.0	95.0	90.6	86.1	85.0
52.5°	141.9	129.7	118.7	104.3	97.2	90.6	82.3	75.6	71.8	66.8	66.2
55°	127.0	116.5	104.3	89.4	82.3	75.6	66.8	60.2	55.2	51.9	50.8
57.5°	111.0	101.0	89.4	74.5	67.4	60.2	51.9	45.8	41.4	38.7	38.1
60°	96.1	86.7	75.6	60.7	53.5	47.5	38.7	32.6	28.7	26.5	25.4
62.5°	85.0	76.2	65.7	51.9	45.3	39.2	30.9	25.4	22.1	19.9	18.8
65°	74.5	65.7	56.3	43.6	38.1	32.6	24.8	19.9	16.6	14.3	13.2
67.5°	63.5	55.8	46.9	36.4	30.9	26.5	19.9	15.5	12.7	11.0	9.9
70°	52.4	45.3	38.1	29.3	25.4	21.0	15.5	12.1	9.4	8.3	7.2
72.5°	41.4	35.9	29.8	22.6	19.3	16.6	12.1	8.8	7.2	6.1	5.0
75°	30.9	27.1	22.1	17.1	14.3	12.1	8.8	6.6	5.5	4.4	3.9
77.5°	22.1	18.8	15.5	11.6	10.5	8.8	6.1	5.0	3.9	2.8	2.2
80°	14.9	13.2	10.5	8.3	6.6	6.1	4.4	3.3	2.2	1.7	1.7
82.5°	9.9	8.3	6.6	5.0	4.4	3.9	2.8	2.2	1.7	1.1	1.1
85°	6.1	5.0	3.9	2.8	2.8	2.2	1.7	1.1	0.6	0.6	0.6
87.5°	2.8	2.2	1.7	1.1	1.1	0.6	0.6	0.6	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°	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4
2.5°	434.0	430.6	428.4	431.2	432.3	430.6	432.3	435.1	437.8	438.4	430.6
5°	434.5	431.2	430.1	433.4	434.0	433.4	435.1	438.9	442.2	443.3	435.6
7.5°	434.5	432.3	431.7	435.6	436.2	435.6	438.4	442.8	446.1	448.3	440.6
10°	433.4	432.3	432.8	436.2	437.3	437.3	441.1	446.1	449.4	451.6	443.9
12.5°	431.7	431.7	431.7	435.6	436.7	437.3	440.6	447.2	449.4	452.7	445.0
15°	429.0	429.0	429.0	432.8	434.5	434.5	438.4	444.4	447.2	450.5	442.8
17.5°	424.0	424.0	424.6	427.9	429.5	429.5	433.4	440.0	441.7	445.6	437.8
20°	416.8	416.8	417.4	420.7	422.4	421.2	426.2	431.7	433.4	436.7	429.0
22.5°	406.3	406.3	406.3	409.7	410.8	410.2	415.2	420.1	420.1	424.6	416.3
25°	390.9	392.0	390.9	394.2	395.3	394.8	399.2	403.6	402.5	407.5	399.2
27.5°	372.1	371.6	371.6	374.3	374.3	373.8	377.1	382.1	381.0	384.3	376.5
30°	346.2	347.8	345.1	348.9	347.3	346.2	348.4	352.8	351.1	353.9	347.8
32.5°	316.3	314.1	314.1	314.1	315.2	312.5	314.7	316.9	315.2	318.0	311.4
35°	277.2	277.7	276.0	276.6	277.2	273.8	276.0	278.3	276.0	277.7	271.6
37.5°	238.0	238.5	234.6	236.9	234.6	233.5	235.8	236.9	234.6	236.3	229.7
40°	198.8	197.7	197.1	197.1	197.7	194.9	196.6	198.2	196.6	197.7	191.6
42.5°	164.5	164.0	162.9	163.4	161.8	161.2	161.8	163.4	161.8	162.9	158.4
45°	134.7	133.6	132.0	132.5	132.5	129.7	131.4	132.5	130.9	131.4	127.5
47.5°	107.1	105.4	105.4	104.9	104.9	103.8	105.4	104.9	103.2	104.3	100.5
50°	83.4	82.3	82.3	82.3	82.3	80.6	81.2	82.3	80.6	80.6	78.4
52.5°	65.1	63.5	62.4	62.4	62.4	61.8	61.8	62.4	60.7	60.7	60.2
55°	49.1	48.6	46.9	46.9	46.9	45.3	45.8	45.8	45.3	45.3	43.6
57.5°	36.4	34.8	33.7	33.7	32.6	32.6	32.0	32.6	31.5	31.5	30.4
60°	24.3	23.2	22.6	22.1	22.1	21.5	22.1	21.5	21.5	21.0	20.4
62.5°	17.7	16.6	15.5	15.5	15.5	14.9	14.9	14.9	14.9	14.9	14.3
65°	12.7	11.6	11.6	11.0	11.0	10.5	10.5	10.5	10.5	10.5	9.9
67.5°	8.8	8.3	7.7	7.7	7.7	7.7	7.7	7.7	7.2	7.2	7.2
70°	6.6	6.1	5.5	5.5	5.5	5.5	5.5	5.0	5.5	5.5	5.0
72.5°	4.4	4.4	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
75°	3.3	3.3	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
77.5°	2.2	2.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	1.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	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: P859635

CATALOG NUMBER: LX4C08D010 EX4C089027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	428.4	428.4	428.4	428.4	428.4	428.4	428.4	428.4
2.5°	438.9	438.4	437.3	438.9	434.5	432.8	432.3	437.3
5°	445.0	443.9	443.9	445.6	440.6	439.5	438.4	443.9
7.5°	450.5	449.4	449.4	451.1	446.7	445.6	444.4	450.0
10°	453.8	453.8	453.8	454.9	451.1	450.0	449.4	454.9
12.5°	455.5	455.5	454.9	457.1	452.2	452.2	451.1	456.6
15°	453.3	453.3	453.3	454.9	450.5	449.4	449.4	453.8
17.5°	447.8	447.8	447.2	448.9	443.9	443.9	443.3	448.3
20°	439.5	439.5	438.4	440.6	435.6	434.0	433.4	438.4
22.5°	426.2	425.7	425.1	426.2	421.8	420.7	420.1	424.6
25°	409.1	408.6	407.5	408.6	403.6	401.9	401.9	405.2
27.5°	384.8	384.8	383.2	384.8	379.3	378.7	378.2	382.1
30°	355.0	352.8	351.7	353.9	348.4	348.4	347.3	351.1
32.5°	318.0	315.8	315.2	316.3	311.4	309.7	311.9	314.1
35°	275.5	276.0	273.8	273.8	269.4	270.0	270.5	273.8
37.5°	234.6	233.5	233.0	233.5	230.2	229.1	228.0	231.3
40°	196.6	193.8	193.2	193.2	190.5	189.9	190.5	192.1
42.5°	160.7	160.1	157.9	159.0	156.2	157.3	156.8	156.8
45°	129.7	130.3	128.1	129.7	127.5	125.9	125.9	127.0
47.5°	102.7	102.7	102.1	102.1	100.5	101.0	99.9	101.6
50°	79.5	79.5	78.4	79.0	77.8	77.8	77.3	77.8
52.5°	60.7	60.2	60.2	59.6	58.5	59.1	59.6	58.5
55°	44.2	44.7	43.6	44.2	43.1	43.6	43.1	43.6
57.5°	30.4	30.9	29.8	30.9	29.8	30.4	29.8	29.8
60°	21.0	21.0	20.4	21.0	20.4	20.4	19.9	21.0
62.5°	14.3	14.3	14.3	14.3	14.3	13.8	14.3	14.3
65°	10.5	9.9	9.9	9.9	9.9	9.9	9.9	9.9
67.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
70°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
75°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.6	0.6	0.6	0.0	0.6	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)