

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: P859681

Luminaire Tested: **LX4C08D010 EX4C089035 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P859681
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 EX4C089035 4LBSWNH
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

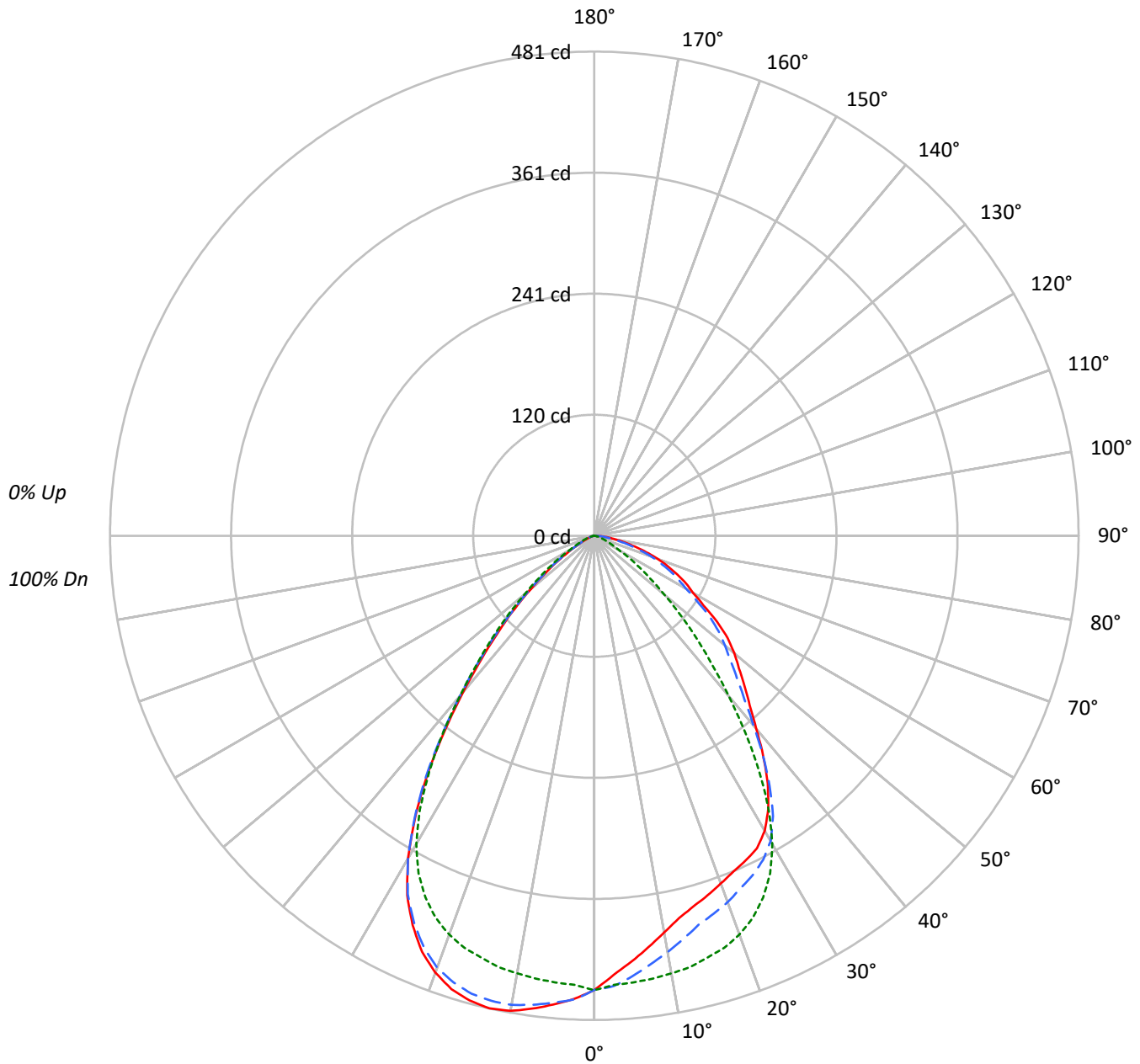
Lumens per Lamp: N/A
Luminaire Lumens: 791.0 lumens
Efficiency: N/A
Efficacy: 79.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P859681

CATALOG NUMBER: LX4C08D010 EX4C089035 4LBSWNH

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°	55444	55444	55444
5°	52351	54928	57653
10°	49912	55064	59780
15°	48446	55174	60796
20°	48046	55119	60362
25°	48244	53761	57854
30°	48005	50161	52459
35°	45008	42818	43253
40°	40093	33197	32460
45°	36677	24758	23229
50°	34670	17335	15672
55°	31893	11716	9831
60°	27863	6855	5430
65°	26366	4390	3052
70°	24030	3125	1868
75°	19889	2231	1377
80°	15635	1273	849
85°	13955	846	0



TEST NUMBER: P859681

CATALOG NUMBER: LX4C08D010 EX4C089035 4LBSWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	5.4
10°-20°	122.3	15.5
20°-30°	181.3	22.9
30°-40°	181.6	23.0
40°-50°	126.9	16.0
50°-60°	75.5	9.5
60°-70°	39.4	5.0
70°-80°	17.5	2.2
80°-90°	3.8	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°	346.3	43.8
0°-40°	527.8	66.7
0°-60°	730.3	92.3
0°-90°	791.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	791.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	451	451	451	451	451	
5°	424	439	445	466	468	40
15°	381	400	434	471	478	108
25°	356	372	397	424	427	164
35°	300	304	286	291	288	186
45°	211	201	142	138	134	164
55°	149	140	55	48	46	132
65°	91	83	15	11	10	90
75°	42	37	5	3	3	45
85°	10	8	1	1	0	11
90°	0	0	0	0	0	



TEST NUMBER: P859681

CATALOG NUMBER: LX4C08D010 EX4C089035 4LBSWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3
2.5°	436.7	442.0	436.7	438.5	445.4	439.0	442.5	442.5	440.8	444.8	447.8
5°	424.5	429.7	424.5	426.8	434.4	428.0	432.1	430.9	431.5	435.0	439.0
7.5°	412.3	416.4	411.7	414.6	421.6	416.4	419.8	419.8	420.4	425.7	429.2
10°	400.1	403.6	400.1	402.4	410.0	405.3	407.6	408.2	410.0	414.6	419.8
12.5°	389.0	391.9	388.5	391.9	398.3	393.7	396.6	397.2	398.9	404.2	410.0
15°	380.9	383.8	380.3	383.2	389.0	385.5	387.9	389.0	390.2	394.8	400.1
17.5°	374.5	376.8	373.9	377.4	382.0	378.0	381.5	381.5	383.2	387.9	393.7
20°	367.5	369.8	367.5	370.4	375.7	372.2	375.1	375.1	376.8	382.0	387.3
22.5°	361.1	362.3	361.1	363.4	368.7	365.8	367.5	368.1	369.8	374.5	379.2
25°	355.9	358.2	357.0	359.4	362.9	360.0	361.7	362.3	364.0	368.1	372.2
27.5°	350.1	351.2	350.1	353.0	355.9	353.6	355.3	354.7	355.9	359.4	362.9
30°	338.4	339.6	339.6	341.3	343.7	342.5	344.3	342.5	343.7	346.6	350.1
32.5°	321.6	322.2	322.7	324.5	326.2	324.5	325.7	325.7	325.7	328.0	330.3
35°	300.1	301.2	300.6	301.8	303.5	303.0	303.0	302.4	301.2	302.4	303.5
37.5°	275.6	273.9	273.9	275.6	276.8	274.5	275.6	274.5	274.5	275.0	275.0
40°	250.0	248.3	250.0	250.6	251.2	250.0	249.5	248.3	246.6	247.1	246.0
42.5°	228.5	227.4	228.0	228.0	228.5	227.4	228.0	225.6	223.9	222.7	221.0
45°	211.1	209.4	211.1	209.9	209.9	209.4	208.8	207.6	205.3	203.5	200.6
47.5°	194.8	194.8	195.4	195.4	195.4	194.2	194.2	191.9	189.6	187.2	183.2
50°	181.4	180.3	182.6	182.6	180.9	180.3	180.9	177.9	176.2	173.3	169.2
52.5°	166.9	166.9	167.5	167.5	166.9	165.7	166.3	164.0	162.2	159.3	155.3
55°	148.9	147.7	149.4	149.4	148.9	148.3	148.9	147.1	145.4	143.1	139.6
57.5°	128.5	127.9	129.1	129.7	128.5	128.5	129.1	127.4	126.8	124.4	121.0
60°	113.4	112.8	114.0	114.6	113.4	113.4	113.4	111.1	109.9	107.6	105.2
62.5°	102.9	102.4	103.5	102.9	102.4	101.8	102.4	100.0	98.9	96.5	94.2
65°	90.7	91.3	91.9	91.9	91.3	90.7	90.7	89.6	88.4	86.1	83.2
67.5°	79.1	79.1	79.7	80.2	79.7	79.7	79.7	77.9	76.8	75.0	71.5
70°	66.9	66.3	68.0	68.0	66.9	67.5	66.9	66.3	65.1	62.8	59.9
72.5°	54.1	54.1	54.7	54.7	54.1	54.1	54.1	53.5	51.7	50.6	47.7
75°	41.9	41.9	42.4	43.0	41.9	41.9	42.4	41.3	40.1	38.4	36.6
77.5°	31.4	30.8	31.4	31.4	30.8	30.8	30.8	30.2	29.7	27.9	26.2
80°	22.1	21.5	22.1	22.1	22.1	21.5	21.5	20.9	20.9	19.8	18.0
82.5°	15.1	14.5	15.1	15.1	15.1	14.5	14.5	14.5	14.0	13.4	12.2
85°	9.9	9.3	9.3	9.9	9.3	9.3	9.3	9.3	8.7	8.1	7.6
87.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.1	4.1	4.1	3.5
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: P859681

CATALOG NUMBER: LX4C08D010 EX4C089035 4LBSWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3
2.5°	445.4	444.3	447.8	446.6	447.2	444.3	448.9	446.6	449.5	446.6	452.4
5°	437.9	436.7	442.0	441.4	442.0	439.6	444.8	444.3	447.8	445.4	451.8
7.5°	429.7	428.6	434.4	435.0	436.1	433.8	440.8	440.8	444.3	443.7	450.7
10°	420.4	421.0	426.8	428.0	430.3	429.2	435.5	437.3	442.0	441.4	450.1
12.5°	411.7	411.7	419.3	421.6	423.3	422.8	430.3	432.7	437.9	439.0	447.2
15°	403.0	403.6	410.5	414.0	416.4	415.8	423.9	426.8	433.2	433.8	443.7
17.5°	396.0	395.4	403.0	405.9	409.4	408.8	417.5	421.0	427.4	429.2	438.5
20°	390.2	389.6	396.6	400.1	402.4	401.8	410.5	414.6	420.4	421.6	430.9
22.5°	383.2	382.0	389.0	391.9	394.3	393.7	401.2	404.2	410.0	411.1	419.8
25°	375.1	373.9	380.3	382.0	383.8	382.6	389.0	390.8	395.4	396.6	405.3
27.5°	365.8	362.9	368.1	368.1	369.3	367.5	372.2	373.9	378.0	378.0	386.1
30°	351.2	347.2	350.1	349.5	350.1	347.7	350.7	351.2	354.1	353.6	359.4
32.5°	330.9	325.1	326.8	325.1	323.3	319.8	323.3	322.2	324.5	322.2	327.4
35°	303.0	297.2	296.6	294.2	292.5	289.6	289.6	286.7	287.3	285.5	289.0
37.5°	272.7	265.2	264.0	259.4	256.4	253.0	253.0	250.6	247.7	246.6	249.5
40°	243.1	234.9	232.0	224.5	221.5	218.1	215.7	212.8	211.7	207.0	209.4
42.5°	217.5	208.8	202.4	194.2	191.3	186.1	182.6	179.1	177.4	172.1	174.5
45°	196.0	185.5	178.5	168.0	164.0	158.2	152.9	148.9	144.8	142.5	141.3
47.5°	177.9	166.9	157.6	146.0	139.6	134.3	127.4	123.3	118.1	115.1	113.4
50°	162.8	150.6	140.1	126.8	120.4	114.6	106.4	100.0	95.4	90.7	89.6
52.5°	149.4	136.7	125.0	109.9	102.4	95.4	86.6	79.7	75.6	70.4	69.8
55°	133.7	122.7	109.9	94.2	86.6	79.7	70.4	63.4	58.2	54.7	53.5
57.5°	116.9	106.4	94.2	78.5	70.9	63.4	54.7	48.3	43.6	40.7	40.1
60°	101.2	91.3	79.7	64.0	56.4	50.0	40.7	34.3	30.2	27.9	26.7
62.5°	89.6	80.2	69.2	54.7	47.7	41.3	32.6	26.7	23.3	20.9	19.8
65°	78.5	69.2	59.3	45.9	40.1	34.3	26.2	20.9	17.4	15.1	14.0
67.5°	66.9	58.7	49.4	38.4	32.6	27.9	20.9	16.3	13.4	11.6	10.5
70°	55.2	47.7	40.1	30.8	26.7	22.1	16.3	12.8	9.9	8.7	7.6
72.5°	43.6	37.8	31.4	23.8	20.4	17.4	12.8	9.3	7.6	6.4	5.2
75°	32.6	28.5	23.3	18.0	15.1	12.8	9.3	7.0	5.8	4.7	4.1
77.5°	23.3	19.8	16.3	12.2	11.1	9.3	6.4	5.2	4.1	2.9	2.3
80°	15.7	14.0	11.1	8.7	7.0	6.4	4.7	3.5	2.3	1.8	1.8
82.5°	10.5	8.7	7.0	5.2	4.7	4.1	2.9	2.3	1.8	1.2	1.2
85°	6.4	5.2	4.1	2.9	2.9	2.3	1.8	1.2	0.6	0.6	0.6
87.5°	2.9	2.3	1.8	1.2	1.2	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



TEST NUMBER: P859681

CATALOG NUMBER: LX4C08D010 EX4C089035 4LBSWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3
2.5°	457.1	453.6	451.3	454.1	455.3	453.6	455.3	458.2	461.1	461.7	453.6
5°	457.7	454.1	453.0	456.5	457.1	456.5	458.2	462.3	465.8	467.0	458.8
7.5°	457.7	455.3	454.7	458.8	459.4	458.8	461.7	466.4	469.9	472.2	464.0
10°	456.5	455.3	455.9	459.4	460.6	460.6	464.6	469.9	473.3	475.7	467.5
12.5°	454.7	454.7	454.7	458.8	460.0	460.6	464.0	471.0	473.3	476.8	468.7
15°	451.8	451.8	451.8	455.9	457.7	457.7	461.7	468.1	471.0	474.5	466.4
17.5°	446.6	446.6	447.2	450.7	452.4	452.4	456.5	463.5	465.2	469.3	461.1
20°	439.0	439.0	439.6	443.1	444.8	443.7	448.9	454.7	456.5	460.0	451.8
22.5°	428.0	428.0	428.0	431.5	432.7	432.1	437.3	442.5	442.5	447.2	438.5
25°	411.7	412.9	411.7	415.2	416.4	415.8	420.4	425.1	423.9	429.2	420.4
27.5°	391.9	391.3	391.3	394.3	394.3	393.7	397.2	402.4	401.2	404.7	396.6
30°	364.6	366.3	363.4	367.5	365.8	364.6	366.9	371.6	369.8	372.7	366.3
32.5°	333.2	330.9	330.9	330.9	332.0	329.1	331.5	333.8	332.0	335.0	328.0
35°	291.9	292.5	290.8	291.3	291.9	288.4	290.8	293.1	290.8	292.5	286.1
37.5°	250.6	251.2	247.1	249.5	247.1	246.0	248.3	249.5	247.1	248.9	241.9
40°	209.4	208.2	207.6	207.6	208.2	205.3	207.0	208.8	207.0	208.2	201.8
42.5°	173.3	172.7	171.6	172.1	170.4	169.8	170.4	172.1	170.4	171.6	166.9
45°	141.9	140.7	139.0	139.6	139.6	136.7	138.4	139.6	137.8	138.4	134.3
47.5°	112.8	111.1	111.1	110.5	110.5	109.3	111.1	110.5	108.7	109.9	105.8
50°	87.8	86.6	86.6	86.6	86.6	84.9	85.5	86.6	84.9	84.9	82.6
52.5°	68.6	66.9	65.7	65.7	65.7	65.1	65.1	65.7	64.0	64.0	63.4
55°	51.7	51.2	49.4	49.4	49.4	47.7	48.3	48.3	47.7	47.7	45.9
57.5°	38.4	36.6	35.5	35.5	34.3	34.3	33.7	34.3	33.1	33.1	32.0
60°	25.6	24.4	23.8	23.3	23.3	22.7	23.3	22.7	22.7	22.1	21.5
62.5°	18.6	17.4	16.3	16.3	16.3	15.7	15.7	15.7	15.7	15.7	15.1
65°	13.4	12.2	12.2	11.6	11.6	11.1	11.1	11.1	11.1	11.1	10.5
67.5°	9.3	8.7	8.1	8.1	8.1	8.1	8.1	8.1	7.6	7.6	7.6
70°	7.0	6.4	5.8	5.8	5.8	5.8	5.8	5.2	5.8	5.8	5.2
72.5°	4.7	4.7	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	3.5	3.5	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.3	2.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80°	1.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	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: P859681

CATALOG NUMBER: LX4C08D010 EX4C089035 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	451.3	451.3	451.3	451.3	451.3	451.3	451.3	451.3
2.5°	462.3	461.7	460.6	462.3	457.7	455.9	455.3	460.6
5°	468.7	467.5	467.5	469.3	464.0	462.9	461.7	467.5
7.5°	474.5	473.3	473.3	475.1	470.4	469.3	468.1	473.9
10°	478.0	478.0	478.0	479.2	475.1	473.9	473.3	479.2
12.5°	479.7	479.7	479.2	481.5	476.3	476.3	475.1	480.9
15°	477.4	477.4	477.4	479.2	474.5	473.3	473.3	478.0
17.5°	471.6	471.6	471.0	472.8	467.5	467.5	467.0	472.2
20°	462.9	462.9	461.7	464.0	458.8	457.1	456.5	461.7
22.5°	448.9	448.3	447.8	448.9	444.3	443.1	442.5	447.2
25°	430.9	430.3	429.2	430.3	425.1	423.3	423.3	426.8
27.5°	405.3	405.3	403.6	405.3	399.5	398.9	398.3	402.4
30°	373.9	371.6	370.4	372.7	366.9	366.9	365.8	369.8
32.5°	335.0	332.6	332.0	333.2	328.0	326.2	328.5	330.9
35°	290.2	290.8	288.4	288.4	283.8	284.3	284.9	288.4
37.5°	247.1	246.0	245.4	246.0	242.5	241.3	240.2	243.7
40°	207.0	204.1	203.5	203.5	200.6	200.1	200.6	202.4
42.5°	169.2	168.6	166.3	167.5	164.6	165.7	165.2	165.2
45°	136.7	137.2	134.9	136.7	134.3	132.6	132.6	133.7
47.5°	108.2	108.2	107.6	107.6	105.8	106.4	105.2	107.0
50°	83.7	83.7	82.6	83.2	82.0	82.0	81.4	82.0
52.5°	64.0	63.4	63.4	62.8	61.6	62.2	62.8	61.6
55°	46.5	47.1	45.9	46.5	45.4	45.9	45.4	45.9
57.5°	32.0	32.6	31.4	32.6	31.4	32.0	31.4	31.4
60°	22.1	22.1	21.5	22.1	21.5	21.5	20.9	22.1
62.5°	15.1	15.1	15.1	15.1	15.1	14.5	15.1	15.1
65°	11.1	10.5	10.5	10.5	10.5	10.5	10.5	10.5
67.5°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
70°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
72.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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)