

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: P856830

Luminaire Tested: **LX4C10D010 EX4C109830 4LBSWNH**

Issue Date: 2/18/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P856830  
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: LX4C10D010 EX4C109830 4LBSWNH  
Description:  
Light Source: -  
Ballast/Driver: -

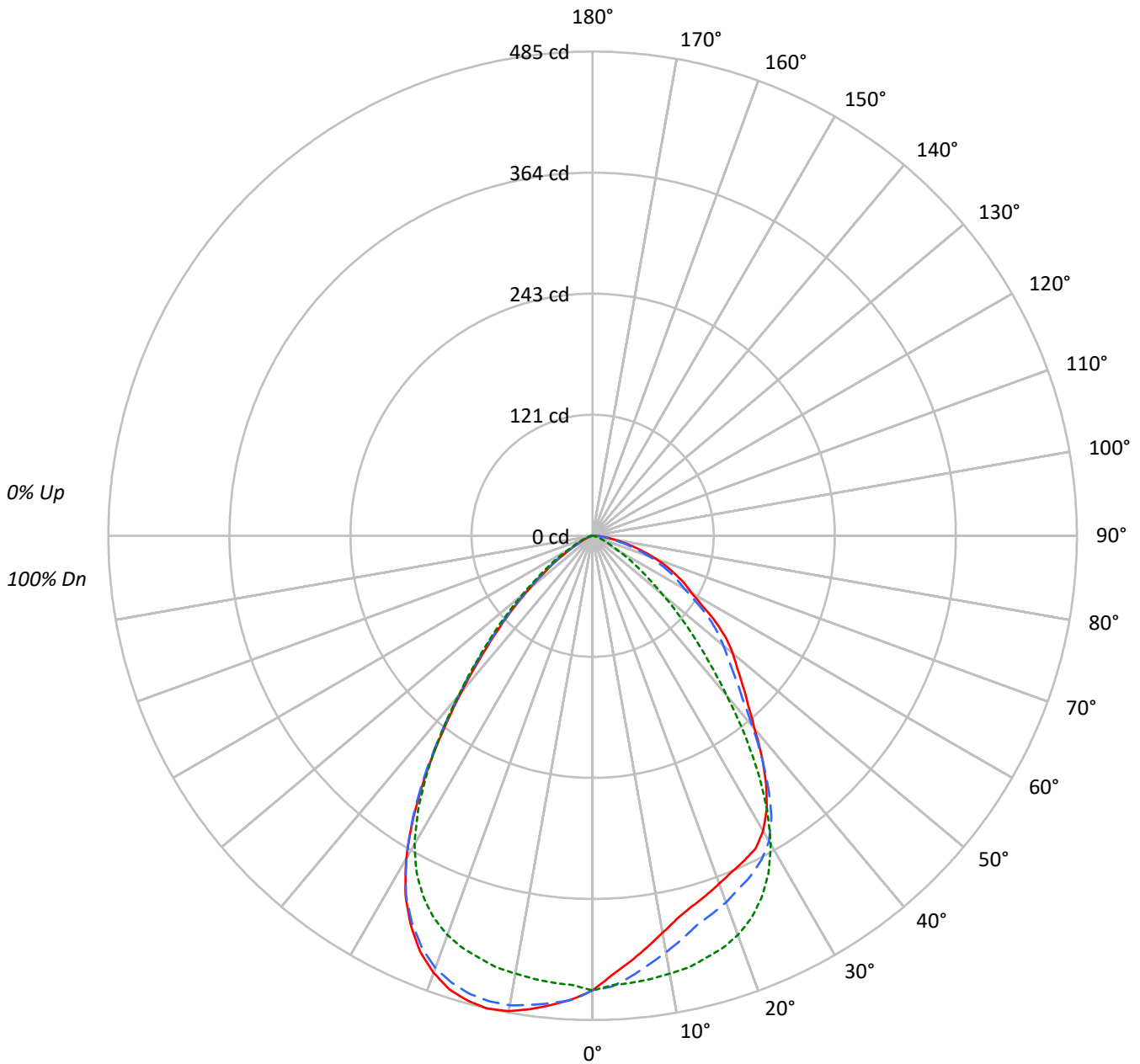
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 798.1 lumens  
Efficiency: N/A  
Efficacy: 81.4 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): 9.8  
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100				
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89				
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79				
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70				70				
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62				62				
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56				56				
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50				50				
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46				46				
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42				42				
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38				38				
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35				35				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	55935	55935	55935
5°	52819	55421	58171
10°	50361	55551	60316
15°	48878	55683	61342
20°	48478	55616	60898
25°	48677	54235	58369
30°	48431	50601	52942
35°	45398	43208	43643
40°	40462	33486	32748
45°	36989	24967	23438
50°	34995	17507	15825
55°	32171	11802	9938
60°	28109	6929	5479
65°	26628	4419	3052
70°	24246	3161	1904
75°	20079	2231	1377
80°	15777	1273	849
85°	14096	846	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.0	5.4
10°-20°	123.4	15.5
20°-30°	183.0	22.9
30°-40°	183.2	23.0
40°-50°	128.0	16.0
50°-60°	76.2	9.5
60°-70°	39.8	5.0
70°-80°	17.7	2.2
80°-90°	3.9	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°	349.4	43.8
0°-40°	532.6	66.7
0°-60°	736.8	92.3
0°-90°	798.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	798.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	455	455	455	455	455	
5°	428	443	449	470	472	40
15°	384	404	438	475	482	109
25°	359	376	400	428	431	165
35°	303	306	288	293	291	188
45°	213	202	144	139	135	165
55°	150	141	55	48	46	133
65°	92	84	15	11	10	91
75°	42	37	5	3	3	46
85°	10	8	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°	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3
2.5°	440.6	446.0	440.6	442.4	449.4	443.0	446.5	446.5	444.7	448.8	451.8
5°	428.3	433.6	428.3	430.6	438.3	431.9	436.0	434.8	435.3	438.9	443.0
7.5°	416.0	420.1	415.4	418.3	425.4	420.1	423.6	423.6	424.2	429.5	433.0
10°	403.7	407.2	403.7	406.0	413.7	409.0	411.3	411.9	413.7	418.3	423.6
12.5°	392.5	395.5	391.9	395.5	401.9	397.2	400.1	400.7	402.5	407.8	413.7
15°	384.3	387.3	383.7	386.7	392.5	389.0	391.4	392.5	393.7	398.3	403.7
17.5°	377.8	380.2	377.3	380.8	385.5	381.4	384.9	384.9	386.7	391.4	397.2
20°	370.8	373.2	370.8	373.7	379.1	375.5	378.5	378.5	380.2	385.5	390.8
22.5°	364.4	365.5	364.4	366.7	371.9	369.1	370.8	371.4	373.2	377.8	382.6
25°	359.1	361.4	360.3	362.6	366.1	363.2	364.9	365.5	367.3	371.4	375.5
27.5°	353.2	354.4	353.2	356.2	359.1	356.7	358.5	357.9	359.1	362.6	366.1
30°	341.4	342.7	342.7	344.4	346.8	345.6	347.3	345.6	346.8	349.7	353.2
32.5°	324.5	325.0	325.7	327.4	329.1	327.4	328.6	328.6	328.6	330.9	333.2
35°	302.7	303.9	303.4	304.5	306.3	305.7	305.7	305.1	303.9	305.1	306.3
37.5°	278.1	276.4	276.4	278.1	279.3	277.0	278.1	277.0	277.0	277.5	277.5
40°	252.3	250.6	252.3	252.9	253.4	252.3	251.7	250.6	248.8	249.3	248.2
42.5°	230.6	229.4	230.0	230.0	230.6	229.4	230.0	227.7	225.9	224.7	222.9
45°	212.9	211.3	212.9	211.8	211.8	211.3	210.6	209.5	207.2	205.4	202.4
47.5°	196.5	196.5	197.2	197.2	197.2	196.0	196.0	193.6	191.3	189.0	184.9
50°	183.1	181.9	184.2	184.2	182.5	181.9	182.5	179.5	177.8	174.9	170.8
52.5°	168.4	168.4	169.0	169.0	168.4	167.2	167.8	165.4	163.7	160.8	156.7
55°	150.2	149.0	150.8	150.8	150.2	149.6	150.2	148.5	146.7	144.4	140.8
57.5°	129.7	129.0	130.3	130.8	129.7	129.7	130.3	128.5	127.9	125.6	122.1
60°	114.4	113.8	115.0	115.6	114.4	114.4	114.4	112.1	110.8	108.5	106.2
62.5°	103.9	103.3	104.4	103.9	103.3	102.6	103.3	100.9	99.8	97.4	95.1
65°	91.6	92.1	92.7	92.7	92.1	91.6	91.6	90.3	89.2	86.9	83.9
67.5°	79.8	79.8	80.3	81.0	80.3	80.3	80.3	78.7	77.4	75.7	72.1
70°	67.5	66.9	68.7	68.7	67.5	68.0	67.5	66.9	65.7	63.4	60.5
72.5°	54.6	54.6	55.1	55.1	54.6	54.6	54.6	54.0	52.2	51.0	48.2
75°	42.3	42.3	42.8	43.4	42.3	42.3	42.8	41.6	40.5	38.7	36.9
77.5°	31.7	31.1	31.7	31.7	31.1	31.1	31.1	30.5	30.0	28.2	26.4
80°	22.3	21.7	22.3	22.3	22.3	21.7	21.7	21.1	21.1	20.0	18.2
82.5°	15.2	14.7	15.2	15.2	15.2	14.7	14.7	14.7	14.1	13.5	12.3
85°	10.0	9.4	9.4	10.0	9.4	9.4	9.4	9.4	8.8	8.2	7.7
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



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3
2.5°	449.4	448.3	451.8	450.6	451.2	448.3	453.0	450.6	453.5	450.6	456.5
5°	441.8	440.6	446.0	445.3	446.0	443.6	448.8	448.3	451.8	449.4	455.9
7.5°	433.6	432.4	438.3	438.9	440.1	437.8	444.7	444.7	448.3	447.7	454.7
10°	424.2	424.8	430.6	431.9	434.2	433.0	439.5	441.2	446.0	445.3	454.2
12.5°	415.4	415.4	423.0	425.4	427.1	426.5	434.2	436.5	441.8	443.0	451.2
15°	406.6	407.2	414.2	417.8	420.1	419.6	427.8	430.6	437.1	437.8	447.7
17.5°	399.6	399.0	406.6	409.6	413.1	412.5	421.3	424.8	431.2	433.0	442.4
20°	393.7	393.1	400.1	403.7	406.0	405.5	414.2	418.3	424.2	425.4	434.8
22.5°	386.7	385.5	392.5	395.5	397.8	397.2	404.9	407.8	413.7	414.8	423.6
25°	378.5	377.3	383.7	385.5	387.3	386.0	392.5	394.3	399.0	400.1	409.0
27.5°	369.1	366.1	371.4	371.4	372.6	370.8	375.5	377.3	381.4	381.4	389.6
30°	354.4	350.3	353.2	352.6	353.2	350.9	353.8	354.4	357.3	356.7	362.6
32.5°	333.9	328.0	329.8	328.0	326.2	322.7	326.2	325.0	327.4	325.0	330.3
35°	305.7	299.8	299.3	296.9	295.2	292.2	292.2	289.3	289.8	288.1	291.6
37.5°	275.2	267.5	266.4	261.7	258.8	255.2	255.2	252.9	250.0	248.8	251.7
40°	245.2	237.0	234.1	226.5	223.6	220.0	217.7	214.7	213.6	208.8	211.3
42.5°	219.5	210.6	204.2	196.0	193.1	187.7	184.2	180.8	179.0	173.7	176.0
45°	197.7	187.2	180.1	169.5	165.4	159.6	154.3	150.2	146.1	143.7	142.6
47.5°	179.5	168.4	159.0	147.2	140.8	135.5	128.5	124.4	119.1	116.2	114.4
50°	164.3	152.0	141.4	127.9	121.5	115.6	107.4	100.9	96.2	91.6	90.3
52.5°	150.8	137.9	126.2	110.8	103.3	96.2	87.4	80.3	76.2	71.0	70.4
55°	134.9	123.8	110.8	95.1	87.4	80.3	71.0	63.9	58.7	55.1	54.0
57.5°	118.0	107.4	95.1	79.2	71.6	63.9	55.1	48.7	44.0	41.1	40.5
60°	102.1	92.1	80.3	64.6	56.9	50.5	41.1	34.6	30.5	28.2	27.0
62.5°	90.3	81.0	69.8	55.1	48.2	41.6	32.9	27.0	23.5	21.1	20.0
65°	79.2	69.8	59.8	46.4	40.5	34.6	26.4	21.1	17.6	15.2	14.1
67.5°	67.5	59.3	49.8	38.7	32.9	28.2	21.1	16.4	13.5	11.8	10.5
70°	55.7	48.2	40.5	31.1	27.0	22.3	16.4	12.9	10.0	8.8	7.7
72.5°	44.0	38.2	31.7	24.1	20.5	17.6	12.9	9.4	7.7	6.4	5.3
75°	32.9	28.7	23.5	18.2	15.2	12.9	9.4	7.0	5.9	4.7	4.1
77.5°	23.5	20.0	16.4	12.3	11.1	9.4	6.4	5.3	4.1	2.9	2.3
80°	15.9	14.1	11.1	8.8	7.0	6.4	4.7	3.5	2.3	1.8	1.8
82.5°	10.5	8.8	7.0	5.3	4.7	4.1	2.9	2.3	1.8	1.2	1.2
85°	6.4	5.3	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



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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3
2.5°	461.2	457.6	455.3	458.3	459.4	457.6	459.4	462.4	465.3	465.8	457.6
5°	461.7	458.3	457.0	460.6	461.2	460.6	462.4	466.5	469.9	471.2	462.9
7.5°	461.7	459.4	458.8	462.9	463.5	462.9	465.8	470.6	474.0	476.5	468.3
10°	460.6	459.4	460.0	463.5	464.7	464.7	468.8	474.0	477.6	479.9	471.7
12.5°	458.8	458.8	458.8	462.9	464.2	464.7	468.3	475.2	477.6	481.1	472.9
15°	455.9	455.9	455.9	460.0	461.7	461.7	465.8	472.4	475.2	478.8	470.6
17.5°	450.6	450.6	451.2	454.7	456.5	456.5	460.6	467.6	469.4	473.5	465.3
20°	443.0	443.0	443.6	447.1	448.8	447.7	453.0	458.8	460.6	464.2	455.9
22.5°	431.9	431.9	431.9	435.3	436.5	436.0	441.2	446.5	446.5	451.2	442.4
25°	415.4	416.6	415.4	418.9	420.1	419.6	424.2	428.9	427.8	433.0	424.2
27.5°	395.5	394.9	394.9	397.8	397.8	397.2	400.7	406.0	404.9	408.3	400.1
30°	367.8	369.6	366.7	370.8	369.1	367.8	370.3	374.9	373.2	376.1	369.6
32.5°	336.2	333.9	333.9	333.9	335.0	332.1	334.4	336.8	335.0	338.0	330.9
35°	294.5	295.2	293.4	294.0	294.5	291.0	293.4	295.7	293.4	295.2	288.7
37.5°	252.9	253.4	249.3	251.7	249.3	248.2	250.6	251.7	249.3	251.1	244.1
40°	211.3	210.1	209.5	209.5	210.1	207.2	208.8	210.6	208.8	210.1	203.6
42.5°	174.9	174.2	173.1	173.7	171.9	171.3	171.9	173.7	171.9	173.1	168.4
45°	143.1	142.0	140.3	140.8	140.8	137.9	139.6	140.8	139.0	139.6	135.5
47.5°	113.8	112.1	112.1	111.5	111.5	110.3	112.1	111.5	109.7	110.8	106.8
50°	88.6	87.4	87.4	87.4	87.4	85.7	86.2	87.4	85.7	85.7	83.3
52.5°	69.2	67.5	66.3	66.3	66.3	65.7	65.7	66.3	64.6	64.6	63.9
55°	52.2	51.6	49.8	49.8	49.8	48.2	48.7	48.7	48.2	48.2	46.4
57.5°	38.7	36.9	35.8	35.8	34.6	34.6	34.1	34.6	33.4	33.4	32.3
60°	25.8	24.6	24.1	23.5	23.5	22.9	23.5	22.9	22.9	22.3	21.7
62.5°	18.7	17.6	16.4	16.4	16.4	15.9	15.9	15.9	15.9	15.9	15.2
65°	13.5	12.3	12.3	11.8	11.8	11.1	11.1	11.1	11.1	11.1	10.5
67.5°	9.4	8.8	8.2	8.2	8.2	8.2	8.2	8.2	7.7	7.7	7.7
70°	7.0	6.4	5.9	5.9	5.9	5.9	5.9	5.3	5.9	5.9	5.3
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





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CATALOG NUMBER: LX4C10D010 EX4C109830 4LBSWNH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	455.3	455.3	455.3	455.3	455.3	455.3	455.3	455.3
2.5°	466.5	465.8	464.7	466.5	461.7	460.0	459.4	464.7
5°	472.9	471.7	471.7	473.5	468.3	467.0	465.8	471.7
7.5°	478.8	477.6	477.6	479.4	474.7	473.5	472.4	478.2
10°	482.3	482.3	482.3	483.5	479.4	478.2	477.6	483.5
12.5°	484.0	484.0	483.5	485.8	480.6	480.6	479.4	485.2
15°	481.7	481.7	481.7	483.5	478.8	477.6	477.6	482.3
17.5°	475.8	475.8	475.2	477.0	471.7	471.7	471.2	476.5
20°	467.0	467.0	465.8	468.3	462.9	461.2	460.6	465.8
22.5°	453.0	452.4	451.8	453.0	448.3	447.1	446.5	451.2
25°	434.8	434.2	433.0	434.2	428.9	427.1	427.1	430.6
27.5°	409.0	409.0	407.2	409.0	403.1	402.5	401.9	406.0
30°	377.3	374.9	373.7	376.1	370.3	370.3	369.1	373.2
32.5°	338.0	335.7	335.0	336.2	330.9	329.1	331.5	333.9
35°	292.8	293.4	291.0	291.0	286.3	286.9	287.5	291.0
37.5°	249.3	248.2	247.6	248.2	244.7	243.5	242.3	245.9
40°	208.8	205.9	205.4	205.4	202.4	201.9	202.4	204.2
42.5°	170.8	170.1	167.8	169.0	166.0	167.2	166.7	166.7
45°	137.9	138.5	136.1	137.9	135.5	133.8	133.8	134.9
47.5°	109.1	109.1	108.5	108.5	106.8	107.4	106.2	108.0
50°	84.4	84.4	83.3	83.9	82.8	82.8	82.1	82.8
52.5°	64.6	63.9	63.9	63.4	62.2	62.8	63.4	62.2
55°	46.9	47.5	46.4	46.9	45.7	46.4	45.7	46.4
57.5°	32.3	32.9	31.7	32.9	31.7	32.3	31.7	31.7
60°	22.3	22.3	21.7	22.3	21.7	21.7	21.1	22.3
62.5°	15.2	15.2	15.2	15.2	15.2	14.7	15.2	15.2
65°	11.1	10.5	10.5	10.5	10.5	10.5	10.5	10.5
67.5°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
70°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
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)