

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P252237

Luminaire Tested: **LE\_6B10D010 EC6B10209024 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252237  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B10D010 EC6B10209024 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 887.5 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

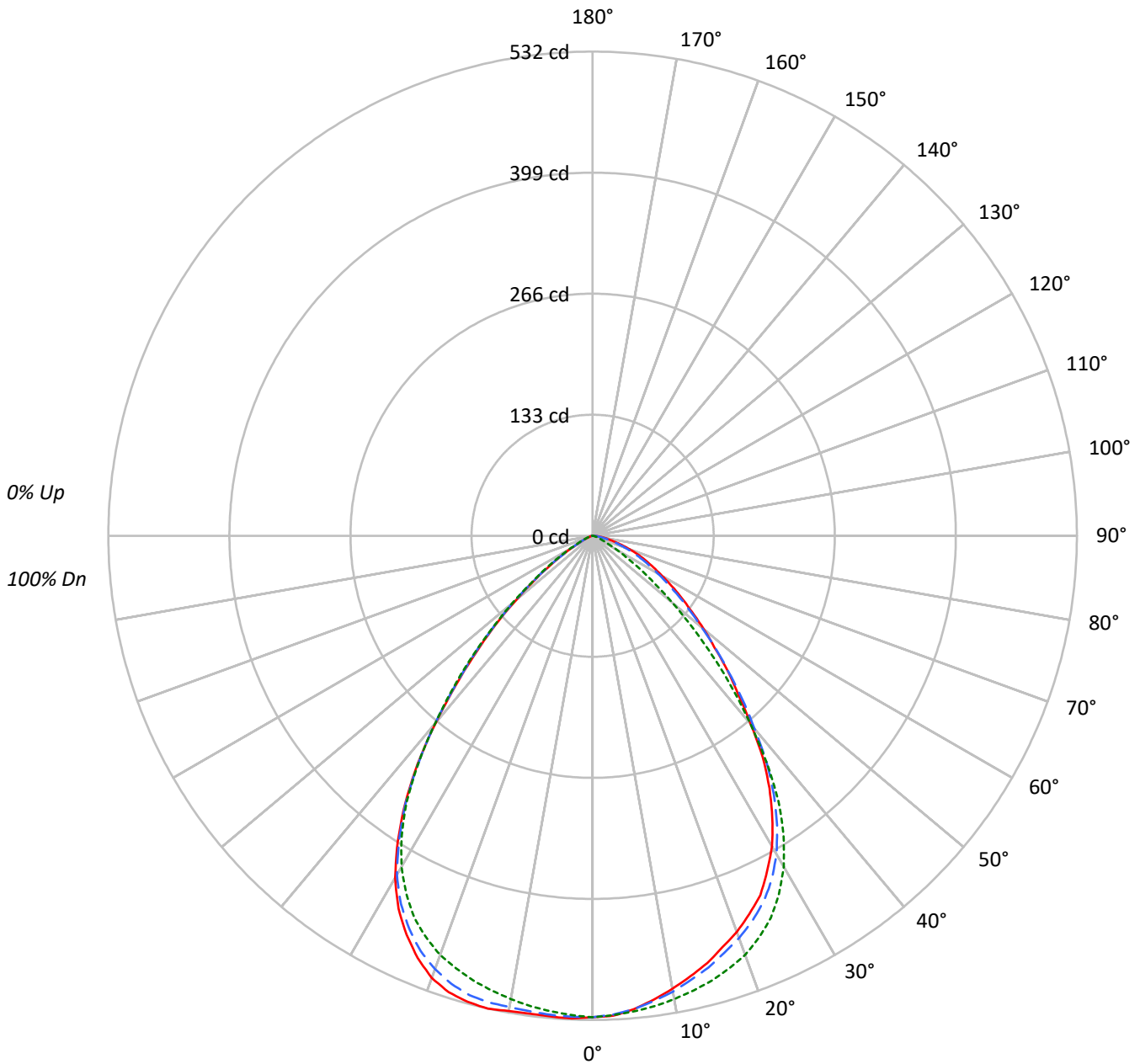
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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																			
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

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

	0°	90°	180°
0°	34512	34512	34512
5°	34186	34349	34723
10°	33481	34243	35124
15°	32839	34176	35811
20°	32159	34020	35887
25°	31371	33343	34812
30°	29696	31625	32680
35°	26967	28345	28592
40°	23012	22910	22807
45°	19329	17152	16617
50°	16148	11611	11023
55°	13592	7120	6472
60°	11495	3758	3249
65°	9957	1976	1575
70°	8298	1221	858
75°	6100	807	479
80°	4809	451	225
85°	3818	449	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.9	5.6
10°-20°	142.7	16.1
20°-30°	210.8	23.8
30°-40°	217.2	24.5
40°-50°	150.0	16.9
50°-60°	74.0	8.3
60°-70°	30.0	3.4
70°-80°	10.7	1.2
80°-90°	2.2	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°	403.4	45.5
0°-40°	620.6	69.9
0°-60°	844.6	95.2
0°-90°	887.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	887.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	529	529	529	529	529	
5°	522	522	524	528	530	49
15°	486	491	506	523	530	137
25°	436	444	463	477	484	199
35°	339	347	356	358	359	210
45°	210	211	186	183	180	162
55°	120	115	63	59	57	108
65°	64	58	13	10	10	64
75°	24	20	3	2	2	27
85°	5	4	1	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°	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0
2.5°	527.8	525.8	527.1	524.5	527.8	524.5	525.1	525.8	525.1	525.8	526.5
5°	522.0	520.0	522.0	518.8	522.0	520.0	520.0	520.8	520.8	521.4	522.0
7.5°	514.2	512.4	514.2	511.1	515.0	513.0	513.0	514.2	513.6	514.2	515.6
10°	505.4	502.8	504.8	502.8	506.6	504.1	505.4	505.4	505.4	507.2	508.5
12.5°	495.8	493.2	495.8	492.6	496.4	494.5	495.1	497.0	497.8	499.0	499.6
15°	486.2	483.0	484.2	482.4	486.2	484.2	484.9	487.5	487.5	489.4	491.2
17.5°	474.0	471.5	474.0	471.5	474.8	473.4	474.8	476.6	476.6	478.5	480.5
20°	463.2	460.6	462.5	460.6	464.5	462.5	463.2	465.8	466.4	468.2	470.2
22.5°	449.8	447.9	449.1	447.2	451.0	449.8	450.4	453.0	453.6	454.9	458.1
25°	435.8	431.9	433.8	432.5	436.4	434.5	435.8	438.2	439.5	441.5	444.0
27.5°	415.2	413.4	414.6	414.6	417.9	415.9	416.5	419.1	421.0	423.0	426.1
30°	394.2	391.0	392.2	392.9	395.5	394.2	395.5	398.0	398.6	401.2	403.8
32.5°	367.4	366.1	368.6	367.4	368.6	368.6	369.2	371.2	372.5	373.8	377.0
35°	338.6	336.0	338.6	337.4	340.5	338.6	340.5	342.5	342.5	345.0	346.9
37.5°	307.2	304.1	305.4	305.4	306.6	306.0	306.0	309.2	309.9	311.8	313.8
40°	270.2	269.0	271.5	270.9	271.5	271.5	272.1	274.1	275.4	276.0	276.6
42.5°	237.0	237.6	238.2	238.2	238.2	238.2	238.2	240.9	240.2	242.1	242.8
45°	209.5	207.0	208.2	207.6	209.5	207.6	209.5	211.5	210.2	212.1	210.9
47.5°	181.5	181.5	181.5	180.8	182.1	181.5	182.8	183.4	183.4	183.4	182.8
50°	159.1	157.1	157.8	157.8	158.5	157.8	159.1	159.8	159.8	158.5	155.9
52.5°	137.4	136.8	136.8	138.0	138.0	137.4	137.4	137.4	137.4	135.5	134.1
55°	119.5	118.2	118.9	118.9	118.9	118.9	119.5	118.9	118.9	116.9	115.0
57.5°	103.5	102.2	102.2	102.2	102.9	102.2	102.2	102.2	101.6	99.6	97.1
60°	88.1	87.5	88.1	88.1	88.8	88.1	88.1	88.1	86.9	85.0	82.4
62.5°	75.4	75.4	75.4	76.0	76.0	75.4	75.4	74.8	74.1	71.5	69.0
65°	64.5	63.9	64.5	64.5	65.1	65.1	64.5	63.9	63.2	60.8	58.1
67.5°	53.6	53.0	53.6	53.6	54.2	53.6	53.6	53.6	51.8	50.5	47.9
70°	43.5	42.8	42.8	42.8	43.5	42.1	42.8	42.8	41.5	39.6	37.0
72.5°	33.2	33.2	33.2	33.2	33.2	33.2	32.6	32.6	31.2	29.4	28.1
75°	24.2	24.2	24.9	24.9	24.2	24.2	24.2	23.6	23.0	21.8	20.5
77.5°	17.9	17.9	17.9	17.9	17.2	17.2	17.2	16.6	16.0	15.4	14.0
80°	12.8	12.8	12.8	12.1	12.8	12.1	12.1	12.1	10.9	10.2	9.6
82.5°	9.0	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.0	6.4
85°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	4.5	3.9	3.9
87.5°	2.5	3.2	3.2	3.2	3.2	3.2	3.2	2.5	2.5	2.5	1.9
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°	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0
2.5°	526.5	526.5	527.8	525.8	529.0	527.1	526.5	529.6	527.8	527.1	528.4
5°	522.0	522.6	523.2	522.0	525.1	523.2	523.2	526.5	525.1	524.5	526.5
7.5°	516.2	516.9	518.1	517.5	520.0	518.8	519.4	522.6	521.4	521.4	523.2
10°	509.2	510.5	511.8	511.8	515.0	513.6	513.6	517.5	516.2	516.9	519.4
12.5°	500.9	502.8	504.8	505.4	508.5	506.6	507.2	511.8	511.1	511.8	514.2
15°	492.0	494.5	496.4	496.4	500.2	498.4	500.2	504.8	503.5	506.0	509.2
17.5°	481.8	484.2	486.9	487.5	491.2	490.0	492.6	497.0	497.0	498.4	502.1
20°	472.1	475.4	476.6	478.5	482.4	481.8	483.0	488.1	488.1	490.0	493.9
22.5°	459.4	462.5	465.1	467.0	470.2	470.2	472.1	476.6	476.6	477.9	481.8
25°	445.2	449.1	451.0	453.0	456.1	455.5	457.5	461.2	461.9	463.2	467.0
27.5°	427.4	430.6	433.1	434.5	438.9	436.4	438.2	442.8	442.1	443.4	446.6
30°	405.0	408.2	410.8	410.8	414.6	414.6	416.5	418.5	418.5	419.8	422.2
32.5°	378.9	382.8	382.8	384.6	387.1	384.6	387.1	389.8	388.5	390.4	392.2
35°	348.9	350.8	351.4	351.4	353.2	352.6	352.0	354.0	352.6	355.9	357.8
37.5°	312.4	315.0	313.8	315.0	314.4	312.4	312.4	315.6	313.0	313.8	315.6
40°	277.2	277.2	276.6	273.5	274.1	272.1	271.5	272.1	269.6	269.0	271.5
42.5°	240.9	240.2	238.2	233.9	234.5	231.2	228.8	228.8	227.5	226.8	227.5
45°	208.2	206.4	203.1	198.0	196.8	194.2	189.1	187.9	185.9	185.9	186.5
47.5°	178.2	175.8	170.6	164.9	161.6	158.5	153.4	151.4	148.2	147.0	148.2
50°	153.4	148.9	142.5	134.1	131.0	127.1	122.0	118.9	115.6	114.4	113.8
52.5°	130.4	124.0	117.5	107.4	104.8	101.0	93.9	90.8	87.5	85.0	85.0
55°	110.5	104.8	95.9	86.2	82.4	78.6	71.5	67.1	63.9	62.6	61.4
57.5°	92.6	86.2	78.0	67.8	63.9	60.0	53.0	48.5	45.4	43.5	42.1
60°	78.0	70.9	62.6	53.6	49.2	45.4	38.4	33.9	30.6	28.8	27.5
62.5°	63.9	58.1	49.9	41.5	37.8	33.9	28.1	23.6	20.5	19.1	17.2
65°	53.6	47.9	40.2	33.2	30.0	26.2	21.1	17.2	14.8	12.8	11.5
67.5°	43.5	39.0	32.6	26.2	23.0	20.5	16.0	12.8	10.2	9.0	8.2
70°	34.5	30.0	24.9	19.8	17.9	15.4	12.1	9.0	7.6	6.4	5.8
72.5°	25.5	22.4	18.5	14.8	12.8	11.5	8.2	7.0	5.1	4.5	3.9
75°	18.5	16.0	13.4	10.2	9.0	8.2	6.4	4.5	3.9	3.2	2.5
77.5°	12.8	11.5	9.0	7.0	6.4	5.8	4.5	3.2	2.5	1.9	1.9
80°	8.2	7.0	5.8	4.5	4.5	3.9	2.5	1.9	1.9	1.2	1.2
82.5°	5.1	4.5	3.9	3.2	2.5	2.5	1.9	1.2	1.2	0.6	0.6
85°	3.2	2.5	1.9	1.9	1.2	1.2	1.2	0.6	0.6	0.6	0.6
87.5°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0
2.5°	528.4	528.4	529.6	527.8	529.0	529.0	530.2	527.8	529.0	529.6	530.9
5°	525.8	526.5	527.8	527.1	527.8	527.8	529.0	525.8	528.4	528.4	530.2
7.5°	523.2	523.2	524.5	523.9	525.1	525.8	527.1	524.5	527.1	527.1	529.0
10°	520.0	520.0	522.0	521.4	523.2	523.9	525.8	523.2	525.8	526.5	528.4
12.5°	515.6	516.2	518.1	518.1	520.0	521.4	523.2	522.0	525.1	525.8	528.4
15°	510.5	511.8	514.2	513.6	515.6	517.5	520.0	518.1	522.6	523.9	526.5
17.5°	504.1	505.4	507.2	507.2	509.2	510.5	513.6	512.4	516.2	516.9	520.0
20°	494.5	496.4	499.0	498.4	500.2	501.5	504.1	502.8	506.6	507.9	511.1
22.5°	483.0	484.2	486.2	486.2	488.1	489.4	492.0	490.0	493.9	494.5	497.0
25°	467.6	469.0	470.2	470.9	472.8	473.4	474.8	473.4	476.6	477.2	480.5
27.5°	447.9	448.5	450.4	450.4	451.8	452.4	454.2	451.8	456.1	456.1	458.1
30°	424.2	423.6	426.1	424.9	426.1	426.1	428.0	426.8	430.0	428.8	430.6
32.5°	392.9	394.2	394.2	392.9	395.5	394.9	394.9	393.5	395.5	396.1	397.4
35°	356.5	358.4	358.4	359.0	359.8	357.8	358.4	354.6	357.8	358.4	359.0
37.5°	316.9	315.0	316.2	314.4	317.5	313.8	313.8	311.1	313.8	313.8	314.4
40°	271.5	270.9	272.1	270.9	270.2	269.6	268.4	266.4	269.0	267.8	269.6
42.5°	228.8	228.1	228.1	226.8	226.1	226.1	224.9	223.6	223.0	223.0	226.1
45°	184.6	185.9	184.6	184.0	185.2	184.0	184.6	182.1	183.4	182.1	183.4
47.5°	147.6	148.2	147.0	145.6	147.6	145.6	145.6	143.8	146.2	146.2	145.0
50°	114.4	113.8	112.5	113.8	113.1	113.1	113.1	111.1	112.5	110.5	111.8
52.5°	84.4	83.8	83.8	83.0	83.8	83.0	83.0	82.4	82.4	81.8	82.4
55°	61.4	60.8	59.4	59.4	59.4	60.0	59.4	58.8	58.8	58.1	58.8
57.5°	41.5	40.2	40.2	40.2	40.2	39.6	39.6	39.0	39.6	39.0	39.6
60°	26.9	26.9	25.5	25.5	25.5	25.5	25.5	24.9	25.5	25.5	25.5
62.5°	16.6	16.6	16.0	15.4	16.0	15.4	15.4	15.4	16.0	15.4	16.0
65°	10.9	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
67.5°	7.6	7.0	7.0	7.0	7.0	7.0	7.0	6.4	7.0	7.0	7.0
70°	5.1	5.1	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
72.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
75°	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
77.5°	1.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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°	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0
2.5°	529.0	529.6	528.4	529.0	527.8	529.0	529.6	530.9
5°	527.8	528.4	527.1	528.4	527.1	528.4	529.0	530.2
7.5°	526.5	527.8	526.5	527.8	526.5	527.8	528.4	529.6
10°	526.5	528.4	527.1	529.0	527.1	528.4	529.6	530.2
12.5°	526.5	528.4	527.8	529.0	528.4	529.6	530.9	532.2
15°	525.1	527.1	525.8	527.8	527.1	527.8	530.2	530.2
17.5°	518.1	520.0	520.0	521.4	521.4	523.2	524.5	525.8
20°	509.2	511.1	510.5	512.4	512.4	514.2	515.6	516.9
22.5°	495.8	498.4	497.8	499.6	499.0	500.2	502.8	502.1
25°	478.5	481.8	481.1	482.4	481.8	481.8	483.0	483.6
27.5°	457.5	459.4	458.8	460.0	458.8	460.0	461.2	461.9
30°	430.0	431.2	430.6	431.2	430.6	431.9	432.5	433.8
32.5°	396.8	398.6	396.8	398.0	397.4	397.4	400.0	398.6
35°	357.1	357.8	358.4	358.4	357.1	357.8	359.0	359.0
37.5°	313.0	316.2	312.4	314.4	313.8	313.8	313.8	315.6
40°	267.0	267.8	266.4	266.4	266.4	265.8	268.4	267.8
42.5°	223.6	224.2	223.6	221.8	222.4	222.4	224.2	221.8
45°	181.5	182.8	182.1	182.1	180.8	180.8	181.5	180.1
47.5°	143.8	145.0	143.1	143.8	142.5	143.8	143.1	144.4
50°	109.2	110.5	109.9	110.5	110.5	109.2	111.1	108.6
52.5°	81.8	82.4	81.8	81.1	80.5	80.5	81.8	81.1
55°	58.1	57.5	57.5	57.5	58.1	58.1	57.5	56.9
57.5°	39.0	39.0	38.4	38.4	39.0	37.8	38.4	37.8
60°	24.9	24.9	24.9	24.9	24.2	24.9	24.9	24.9
62.5°	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
65°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
67.5°	6.4	7.0	7.0	7.0	6.4	6.4	6.4	6.4
70°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
72.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
75°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.6	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



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— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)