

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: P252243

Luminaire Tested: **LE\_6B10D010 EC6B10209727 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252243  
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 EC6B10209727 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 877.4 lumens  
Efficiency: N/A  
Efficacy: 87.7 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

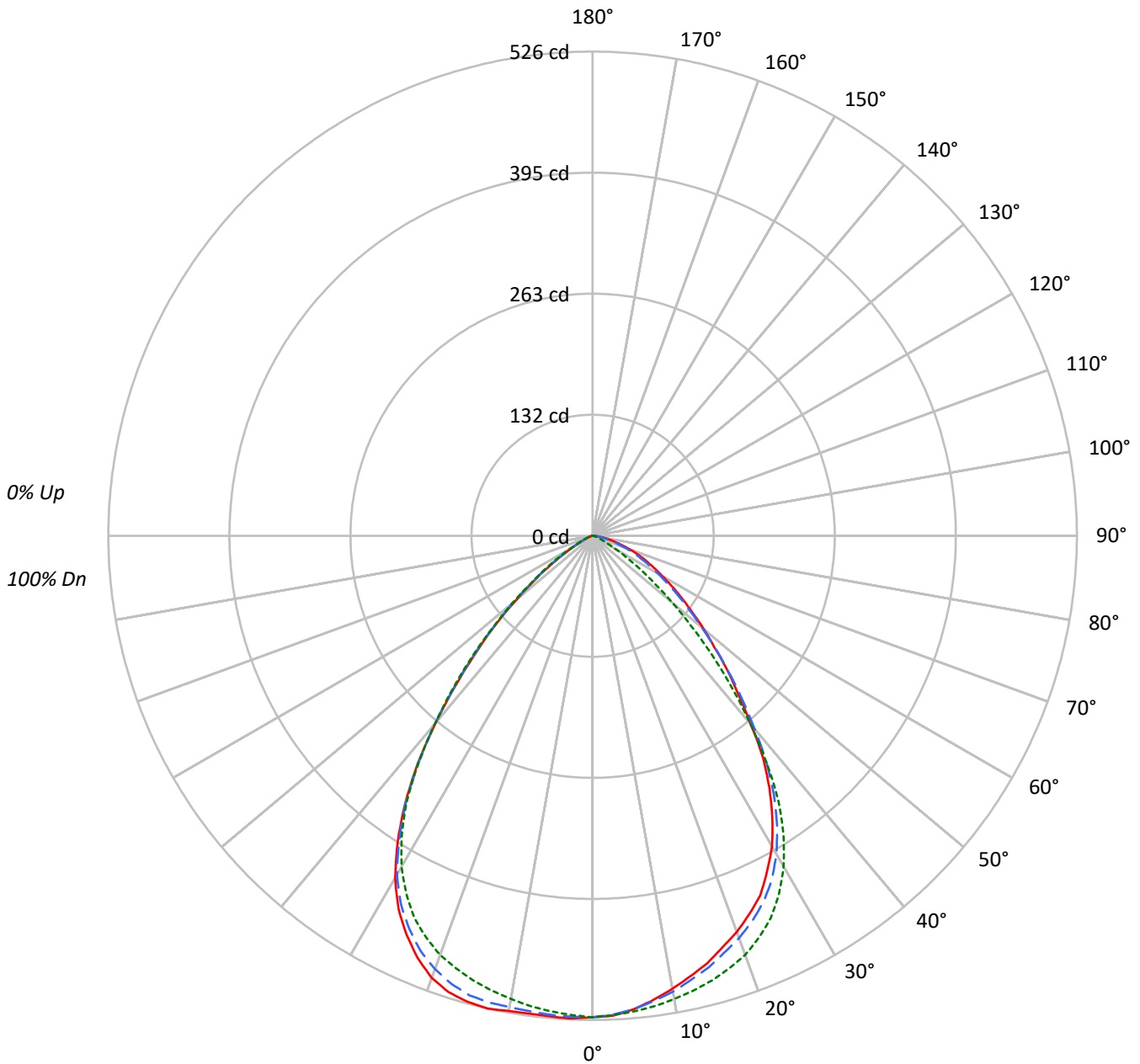
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

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

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

	0°	90°	180°
0°	34121	34121	34121
5°	33799	33963	34330
10°	33097	33852	34727
15°	32474	33785	35406
20°	31798	33638	35478
25°	31018	32969	34423
30°	29365	31263	32310
35°	26665	28027	28274
40°	22756	22654	22535
45°	19117	16967	16432
50°	15955	11479	10901
55°	13433	7041	6392
60°	11365	3706	3210
65°	9849	1945	1559
70°	8202	1221	839
75°	6050	781	479
80°	4734	451	225
85°	3743	449	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.3	5.6
10°-20°	141.1	16.1
20°-30°	208.4	23.8
30°-40°	214.8	24.5
40°-50°	148.3	16.9
50°-60°	73.1	8.3
60°-70°	29.6	3.4
70°-80°	10.5	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°	398.9	45.5
0°-40°	613.6	69.9
0°-60°	835.1	95.2
0°-90°	877.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	877.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	523	523	523	523	523	
5°	516	516	519	522	524	49
15°	481	486	500	517	524	135
25°	431	439	458	471	478	197
35°	335	343	352	354	355	207
45°	207	208	184	181	178	160
55°	118	114	62	58	56	107
65°	64	58	13	10	10	63
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°	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	521.8	519.9	521.1	518.6	521.8	518.6	519.2	519.9	519.2	519.9	520.5
5°	516.1	514.2	516.1	512.9	516.1	514.2	514.2	514.9	514.9	515.5	516.1
7.5°	508.5	506.6	508.5	505.4	509.1	507.2	507.2	508.5	507.9	508.5	509.8
10°	499.6	497.1	499.0	497.1	500.9	498.4	499.6	499.6	499.6	501.6	502.9
12.5°	490.2	487.6	490.2	487.0	490.9	488.9	489.6	491.5	492.1	493.4	494.0
15°	480.8	477.5	478.9	476.9	480.8	478.9	479.5	482.0	482.0	483.9	485.8
17.5°	468.8	466.2	468.8	466.2	469.4	468.1	469.4	471.2	471.2	473.1	475.0
20°	458.0	455.5	457.4	455.5	459.2	457.4	458.0	460.5	461.1	463.0	464.9
22.5°	444.8	442.9	444.1	442.1	446.0	444.8	445.4	447.9	448.5	449.8	452.9
25°	430.9	427.0	428.9	427.6	431.5	429.5	430.9	433.4	434.6	436.5	439.0
27.5°	410.6	408.8	410.0	410.0	413.1	411.2	411.9	414.4	416.2	418.1	421.4
30°	389.8	386.6	387.9	388.5	391.0	389.8	391.0	393.5	394.1	396.8	399.2
32.5°	363.2	362.0	364.5	363.2	364.5	364.5	365.1	367.0	368.2	369.5	372.8
35°	334.8	332.2	334.8	333.5	336.8	334.8	336.8	338.6	338.6	341.1	343.0
37.5°	303.9	300.6	302.0	302.0	303.2	302.6	302.6	305.8	306.4	308.2	310.1
40°	267.2	266.0	268.5	267.9	268.5	268.5	269.1	271.0	272.2	272.9	273.5
42.5°	234.4	235.0	235.6	235.6	235.6	235.6	235.6	238.1	237.5	239.4	240.0
45°	207.2	204.6	205.9	205.2	207.2	205.2	207.2	209.1	207.9	209.8	208.5
47.5°	179.4	179.4	179.4	178.8	180.0	179.4	180.6	181.2	181.2	181.2	180.6
50°	157.2	155.4	156.0	156.0	156.6	156.0	157.2	157.9	157.9	156.6	154.1
52.5°	135.9	135.1	135.1	136.5	136.5	135.9	135.9	135.9	135.9	133.9	132.6
55°	118.1	116.9	117.5	117.5	117.5	117.5	118.1	117.5	117.5	115.6	113.8
57.5°	102.4	101.1	101.1	101.1	101.8	101.1	101.1	101.1	100.5	98.5	96.0
60°	87.1	86.5	87.1	87.1	87.8	87.1	87.1	87.1	85.9	84.0	81.5
62.5°	74.5	74.5	74.5	75.1	75.1	74.5	74.5	73.9	73.2	70.8	68.2
65°	63.8	63.1	63.8	63.8	64.4	64.4	63.8	63.1	62.5	60.0	57.5
67.5°	53.0	52.4	53.0	53.0	53.8	53.0	53.0	53.0	51.1	49.9	47.4
70°	43.0	42.4	42.4	42.4	43.0	41.8	42.4	42.4	41.0	39.1	36.6
72.5°	32.9	32.9	32.9	32.9	32.9	32.9	32.2	32.2	31.0	29.0	27.8
75°	24.0	24.0	24.6	24.6	24.0	24.0	24.0	23.4	22.8	21.5	20.2
77.5°	17.6	17.6	17.6	17.6	17.0	17.0	17.0	16.4	15.8	15.1	13.9
80°	12.6	12.6	12.6	12.0	12.6	12.0	12.0	12.0	10.8	10.1	9.5
82.5°	8.9	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.0	6.4
85°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.4	3.8	3.8
87.5°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	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°	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	520.5	520.5	521.8	519.9	523.0	521.1	520.5	523.6	521.8	521.1	522.4
5°	516.1	516.8	517.4	516.1	519.2	517.4	517.4	520.5	519.2	518.6	520.5
7.5°	510.4	511.0	512.2	511.6	514.2	512.9	513.6	516.8	515.5	515.5	517.4
10°	503.5	504.8	506.0	506.0	509.1	507.9	507.9	511.6	510.4	511.0	513.6
12.5°	495.2	497.1	499.0	499.6	502.9	500.9	501.6	506.0	505.4	506.0	508.5
15°	486.4	488.9	490.9	490.9	494.6	492.8	494.6	499.0	497.8	500.2	503.5
17.5°	476.2	478.9	481.4	482.0	485.8	484.5	487.0	491.5	491.5	492.8	496.5
20°	466.9	470.0	471.2	473.1	476.9	476.2	477.5	482.6	482.6	484.5	488.2
22.5°	454.2	457.4	459.9	461.8	464.9	464.9	466.9	471.2	471.2	472.5	476.2
25°	440.2	444.1	446.0	447.9	451.0	450.4	452.2	456.1	456.8	458.0	461.8
27.5°	422.6	425.8	428.2	429.5	434.0	431.5	433.4	437.8	437.1	438.4	441.5
30°	400.5	403.6	406.1	406.1	410.0	410.0	411.9	413.8	413.8	415.0	417.5
32.5°	374.6	378.4	378.4	380.2	382.8	380.2	382.8	385.4	384.1	386.0	387.9
35°	344.9	346.8	347.4	347.4	349.4	348.8	348.1	350.0	348.8	351.9	353.8
37.5°	308.9	311.4	310.1	311.4	310.8	308.9	308.9	312.0	309.5	310.1	312.0
40°	274.1	274.1	273.5	270.4	271.0	269.1	268.5	269.1	266.6	266.0	268.5
42.5°	238.1	237.5	235.6	231.2	231.9	228.6	226.1	226.1	224.9	224.2	224.9
45°	205.9	204.0	200.9	195.9	194.5	192.0	187.0	185.8	183.9	183.9	184.5
47.5°	176.2	173.8	168.6	163.0	159.9	156.6	151.6	149.8	146.5	145.2	146.5
50°	151.6	147.1	140.9	132.6	129.5	125.8	120.6	117.5	114.4	113.1	112.5
52.5°	128.9	122.5	116.2	106.1	103.6	99.8	92.9	89.8	86.5	84.0	84.0
55°	109.2	103.6	94.8	85.2	81.5	77.8	70.8	66.4	63.1	61.9	60.6
57.5°	91.6	85.2	77.1	67.0	63.1	59.4	52.4	48.0	44.9	43.0	41.8
60°	77.1	70.1	61.9	53.0	48.6	44.9	37.9	33.5	30.4	28.4	27.1
62.5°	63.1	57.5	49.2	41.0	37.2	33.5	27.8	23.4	20.2	19.0	17.0
65°	53.0	47.4	39.8	32.9	29.8	25.9	20.9	17.0	14.5	12.6	11.4
67.5°	43.0	38.5	32.2	25.9	22.8	20.2	15.8	12.6	10.1	8.9	8.2
70°	34.1	29.8	24.6	19.6	17.6	15.1	12.0	8.9	7.6	6.4	5.6
72.5°	25.2	22.1	18.4	14.5	12.6	11.4	8.2	7.0	5.0	4.4	3.8
75°	18.4	15.8	13.2	10.1	8.9	8.2	6.4	4.4	3.8	3.1	2.5
77.5°	12.6	11.4	8.9	7.0	6.4	5.6	4.4	3.1	2.5	1.9	1.9
80°	8.2	7.0	5.6	4.4	4.4	3.8	2.5	1.9	1.9	1.2	1.2
82.5°	5.0	4.4	3.8	3.1	2.5	2.5	1.9	1.2	1.2	0.6	0.6
85°	3.1	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°	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	522.4	522.4	523.6	521.8	523.0	523.0	524.2	521.8	523.0	523.6	525.0
5°	519.9	520.5	521.8	521.1	521.8	521.8	523.0	519.9	522.4	522.4	524.2
7.5°	517.4	517.4	518.6	518.0	519.2	519.9	521.1	518.6	521.1	521.1	523.0
10°	514.2	514.2	516.1	515.5	517.4	518.0	519.9	517.4	519.9	520.5	522.4
12.5°	509.8	510.4	512.2	512.2	514.2	515.5	517.4	516.1	519.2	519.9	522.4
15°	504.8	506.0	508.5	507.9	509.8	511.6	514.2	512.2	516.8	518.0	520.5
17.5°	498.4	499.6	501.6	501.6	503.5	504.8	507.9	506.6	510.4	511.0	514.2
20°	488.9	490.9	493.4	492.8	494.6	495.9	498.4	497.1	500.9	502.2	505.4
22.5°	477.5	478.9	480.8	480.8	482.6	483.9	486.4	484.5	488.2	488.9	491.5
25°	462.4	463.6	464.9	465.5	467.5	468.1	469.4	468.1	471.2	471.9	475.0
27.5°	442.9	443.5	445.4	445.4	446.6	447.2	449.1	446.6	451.0	451.0	452.9
30°	419.5	418.9	421.4	420.1	421.4	421.4	423.2	422.0	425.1	423.9	425.8
32.5°	388.5	389.8	389.8	388.5	391.0	390.4	390.4	389.1	391.0	391.6	392.9
35°	352.5	354.4	354.4	355.0	355.6	353.8	354.4	350.6	353.8	354.4	355.0
37.5°	313.4	311.4	312.8	310.8	314.0	310.1	310.1	307.6	310.1	310.1	310.8
40°	268.5	267.9	269.1	267.9	267.2	266.6	265.2	263.4	266.0	264.6	266.6
42.5°	226.1	225.5	225.5	224.2	223.6	223.6	222.4	221.1	220.5	220.5	223.6
45°	182.5	183.9	182.5	181.9	183.2	181.9	182.5	180.0	181.2	180.0	181.2
47.5°	145.9	146.5	145.2	144.0	145.9	144.0	144.0	142.1	144.6	144.6	143.4
50°	113.1	112.5	111.1	112.5	111.8	111.8	111.8	109.9	111.1	109.2	110.5
52.5°	83.4	82.8	82.8	82.1	82.8	82.1	82.1	81.5	81.5	80.9	81.5
55°	60.6	60.0	58.8	58.8	58.8	59.4	58.8	58.1	58.1	57.5	58.1
57.5°	41.0	39.8	39.8	39.8	39.8	39.1	39.1	38.5	39.1	38.5	39.1
60°	26.5	26.5	25.2	25.2	25.2	25.2	25.2	24.6	25.2	25.2	25.2
62.5°	16.4	16.4	15.8	15.1	15.8	15.1	15.1	15.1	15.8	15.1	15.8
65°	10.8	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
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°	5.0	5.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
72.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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°	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
2.5°	523.0	523.6	522.4	523.0	521.8	523.0	523.6	525.0
5°	521.8	522.4	521.1	522.4	521.1	522.4	523.0	524.2
7.5°	520.5	521.8	520.5	521.8	520.5	521.8	522.4	523.6
10°	520.5	522.4	521.1	523.0	521.1	522.4	523.6	524.2
12.5°	520.5	522.4	521.8	523.0	522.4	523.6	525.0	526.2
15°	519.2	521.1	519.9	521.8	521.1	521.8	524.2	524.2
17.5°	512.2	514.2	514.2	515.5	515.5	517.4	518.6	519.9
20°	503.5	505.4	504.8	506.6	506.6	508.5	509.8	511.0
22.5°	490.2	492.8	492.1	494.0	493.4	494.6	497.1	496.5
25°	473.1	476.2	475.6	476.9	476.2	476.2	477.5	478.2
27.5°	452.2	454.2	453.5	454.9	453.5	454.9	456.1	456.8
30°	425.1	426.4	425.8	426.4	425.8	427.0	427.6	428.9
32.5°	392.2	394.1	392.2	393.5	392.9	392.9	395.5	394.1
35°	353.1	353.8	354.4	354.4	353.1	353.8	355.0	355.0
37.5°	309.5	312.8	308.9	310.8	310.1	310.1	310.1	312.0
40°	264.0	264.6	263.4	263.4	263.4	262.8	265.2	264.6
42.5°	221.1	221.8	221.1	219.2	219.9	219.9	221.8	219.2
45°	179.4	180.6	180.0	180.0	178.8	178.8	179.4	178.1
47.5°	142.1	143.4	141.5	142.1	140.9	142.1	141.5	142.8
50°	108.0	109.2	108.6	109.2	109.2	108.0	109.9	107.4
52.5°	80.9	81.5	80.9	80.2	79.6	79.6	80.9	80.2
55°	57.5	56.9	56.9	56.9	57.5	57.5	56.9	56.2
57.5°	38.5	38.5	37.9	37.9	38.5	37.2	37.9	37.2
60°	24.6	24.6	24.6	24.6	24.0	24.6	24.6	24.6
62.5°	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
65°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
67.5°	6.4	7.0	7.0	7.0	6.4	6.4	6.4	6.4
70°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
72.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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)