

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: io LED

Report Number: P252134

Luminaire Tested: **LD6B10D010 EU6B10209027 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252134  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B10D010 EU6B10209027 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1111.0 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

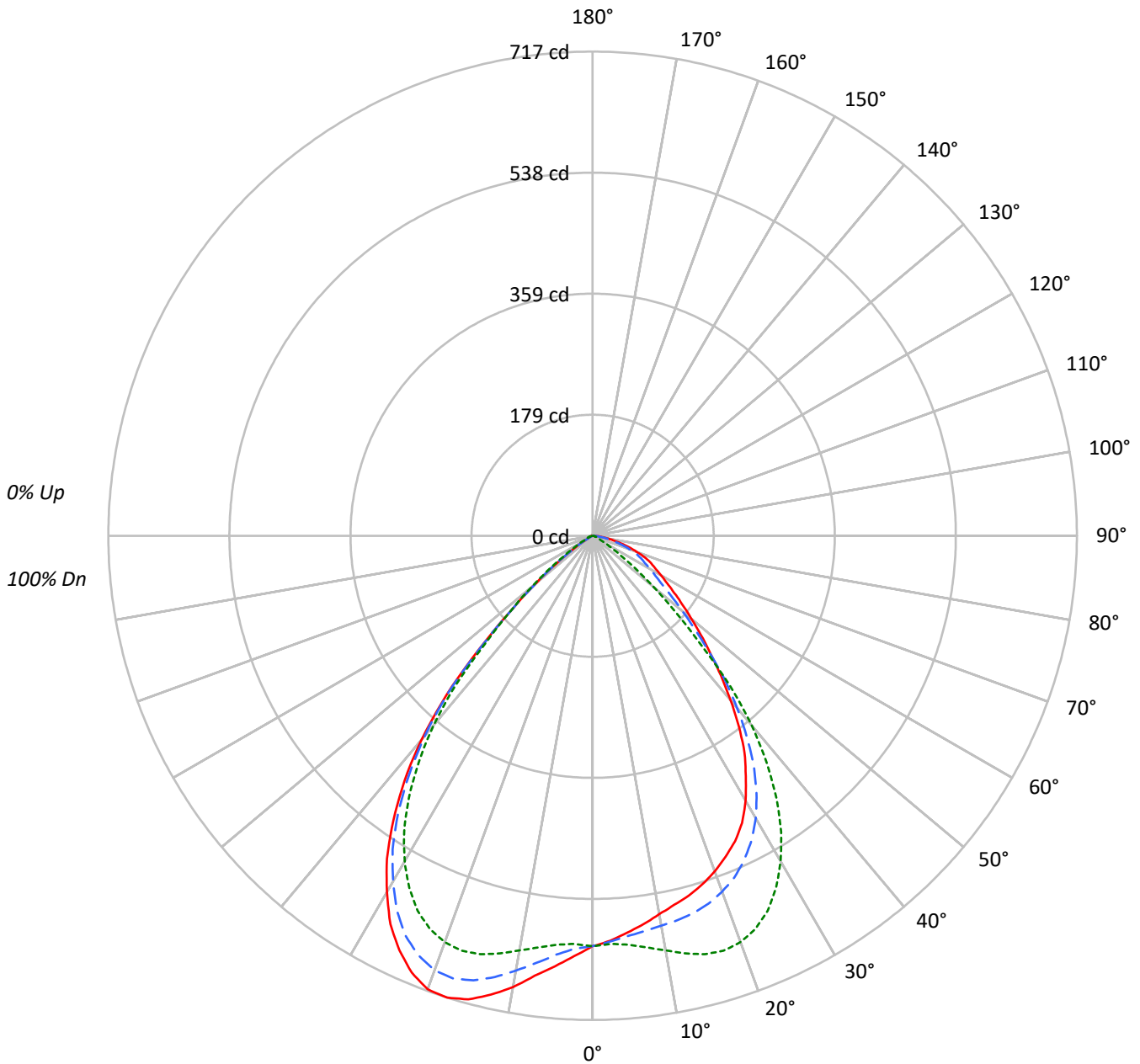
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80																			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72																			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65																			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40																			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37																			

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

	0°	90°	180°
0°	39653	39653	39653
5°	38626	39805	41900
10°	37688	41305	44962
15°	37243	43328	48002
20°	36713	44455	49620
25°	35928	44127	48734
30°	34141	41938	45878
35°	31236	37807	40961
40°	27023	31230	33606
45°	22789	20483	21977
50°	19345	11855	11144
55°	16789	5687	4300
60°	15162	2649	1057
65°	14712	1528	355
70°	13181	1221	324
75°	10839	882	151
80°	8078	451	0
85°	6962	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	5.3
10°-20°	178.9	16.1
20°-30°	273.4	24.6
30°-40°	285.9	25.7
40°-50°	185.5	16.7
50°-60°	73.6	6.6
60°-70°	34.9	3.1
70°-80°	16.6	1.5
80°-90°	3.4	0.3
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°	511.0	46.0
0°-40°	796.9	71.7
0°-60°	1056.1	95.1
0°-90°	1111.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1111.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	608	608	608	608	608	
5°	590	595	608	623	640	56
15°	551	578	642	682	711	155
25°	499	530	613	654	677	229
35°	392	416	475	503	514	243
45°	247	245	222	235	238	192
55°	148	126	50	39	38	134
65°	95	79	10	2	2	93
75°	43	35	4	1	1	46
85°	9	6	0	0	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°	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8
2.5°	600.3	601.4	595.0	593.3	597.9	599.7	600.3	598.5	599.1	601.4	601.4
5°	589.8	591.0	585.1	583.4	588.0	589.2	591.0	590.4	592.1	595.6	595.0
7.5°	579.9	581.7	575.3	572.9	578.8	581.7	582.8	582.8	585.1	589.8	590.4
10°	568.9	571.2	565.4	564.2	570.6	573.5	574.1	575.3	578.8	585.1	586.3
12.5°	559.6	561.9	557.8	556.1	563.1	566.0	567.1	569.5	573.5	581.7	582.8
15°	551.4	553.2	548.5	547.4	554.3	557.8	558.4	561.9	567.1	576.4	578.2
17.5°	541.0	542.1	538.7	537.5	544.5	548.0	548.5	552.6	559.0	568.3	571.2
20°	528.8	529.9	526.5	525.3	532.3	536.3	536.9	540.4	548.0	557.8	560.7
22.5°	514.3	516.6	512.5	511.3	518.3	521.8	523.5	526.5	534.0	543.9	548.0
25°	499.1	499.1	496.2	495.7	502.0	506.1	505.5	509.6	517.2	527.0	530.5
27.5°	479.4	478.8	475.9	475.3	482.3	485.8	484.6	488.7	495.7	505.5	509.0
30°	453.2	454.4	450.3	449.2	455.0	460.8	460.2	464.3	471.3	480.5	482.9
32.5°	421.9	423.0	422.4	420.7	425.9	428.8	430.6	433.5	439.3	449.2	451.5
35°	392.2	390.5	388.2	388.2	393.4	398.0	396.3	399.8	405.6	415.5	416.0
37.5°	355.6	355.0	353.9	352.7	358.5	359.7	360.3	362.6	367.8	376.0	374.8
40°	317.3	317.8	317.3	314.9	318.4	323.1	322.5	323.7	328.3	334.1	332.4
42.5°	281.2	281.2	281.2	278.9	283.0	285.3	286.5	285.9	287.1	292.3	290.0
45°	247.0	247.5	247.0	246.4	247.0	248.1	247.0	246.4	246.4	248.1	244.6
47.5°	217.3	217.3	215.6	213.8	215.6	216.2	214.4	212.7	212.1	211.5	205.7
50°	190.6	190.0	189.4	186.5	188.3	188.8	186.5	185.4	183.0	180.1	173.2
52.5°	167.3	166.8	166.2	163.3	164.4	165.0	162.7	160.4	157.5	155.1	146.4
55°	147.6	147.0	147.0	145.3	144.1	145.3	142.9	141.2	137.1	134.2	125.5
57.5°	130.7	130.7	129.6	127.8	128.4	128.4	126.1	123.8	120.3	116.8	109.8
60°	116.2	116.2	116.2	114.5	114.5	114.5	113.3	111.0	108.1	104.6	97.6
62.5°	104.6	104.6	104.0	102.3	102.9	102.9	101.7	99.4	96.5	94.1	87.2
65°	95.3	95.3	95.3	93.6	93.6	94.1	93.0	90.6	88.3	85.4	79.0
67.5°	83.7	83.1	83.1	81.9	82.5	83.1	81.9	80.2	77.3	75.5	69.7
70°	69.1	69.7	70.3	68.6	69.1	69.1	68.6	66.8	65.1	63.3	58.1
72.5°	56.4	56.4	55.8	55.2	55.2	55.8	54.6	52.9	51.7	50.6	46.5
75°	43.0	42.4	43.0	41.8	41.8	41.8	40.7	40.1	39.5	37.8	34.9
77.5°	31.4	30.8	30.8	29.6	30.2	30.2	29.6	28.5	27.3	26.7	24.4
80°	21.5	21.5	21.5	20.9	20.9	20.3	20.3	19.8	18.6	18.0	16.9
82.5°	14.5	14.5	14.5	13.9	13.9	13.9	13.4	12.8	12.2	11.6	10.5
85°	9.3	9.3	9.3	8.7	8.7	8.7	8.1	8.1	7.6	7.0	5.8
87.5°	5.2	5.2	5.2	4.6	4.6	4.6	4.6	4.6	4.1	3.5	2.9
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°	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8
2.5°	605.5	597.3	602.6	602.6	600.8	605.5	608.4	610.7	610.1	604.9	604.3
5°	600.8	593.9	599.7	600.3	598.5	604.9	609.0	611.9	612.5	607.8	608.4
7.5°	597.3	591.5	599.1	601.4	600.8	606.6	611.3	615.9	618.3	614.8	615.4
10°	595.6	591.0	599.1	602.6	603.2	609.5	616.5	622.9	625.8	623.5	625.2
12.5°	593.3	590.4	599.7	604.9	607.2	613.6	622.3	629.9	634.5	633.4	636.9
15°	591.0	588.6	599.7	607.2	610.1	615.9	625.8	636.9	642.1	641.5	646.2
17.5°	585.1	584.6	596.2	604.3	608.4	615.4	624.7	638.0	643.3	644.4	650.2
20°	575.8	575.8	588.6	597.3	602.0	608.4	620.0	632.8	639.2	640.3	646.7
22.5°	563.1	564.2	576.4	585.1	592.1	596.8	609.0	622.3	628.1	629.9	636.9
25°	546.2	547.4	559.0	567.7	575.3	580.5	592.1	604.3	611.3	613.0	618.3
27.5°	524.1	526.5	537.5	546.2	552.6	556.1	568.3	581.1	586.3	588.0	593.3
30°	498.6	499.1	510.2	517.7	524.1	527.0	537.5	550.9	554.9	556.7	564.2
32.5°	467.2	466.6	477.1	484.0	489.3	492.8	503.8	512.5	516.6	519.5	523.5
35°	429.4	428.8	436.4	444.5	448.6	449.8	460.8	470.1	472.4	474.7	480.0
37.5°	387.0	387.0	393.4	397.5	402.1	403.8	409.1	419.5	423.6	423.0	427.1
40°	342.3	339.9	344.6	348.6	349.8	350.4	355.6	363.8	366.7	366.7	369.6
42.5°	295.2	291.7	292.3	294.6	295.8	291.7	295.2	300.4	298.7	301.0	301.6
45°	245.2	240.0	237.7	232.4	233.6	229.5	227.2	228.4	227.8	222.0	223.1
47.5°	204.5	195.2	191.2	183.6	181.9	177.2	174.3	169.1	164.4	164.4	161.5
50°	170.3	161.0	152.8	144.1	141.2	137.1	130.7	123.8	120.3	116.8	113.9
52.5°	142.9	133.1	123.2	113.9	109.8	104.6	95.9	88.9	82.5	79.0	75.5
55°	120.9	109.8	99.4	89.5	84.3	79.0	70.3	62.2	54.6	50.0	47.1
57.5°	104.0	93.6	82.5	72.1	67.4	61.6	52.3	43.6	36.6	31.4	28.5
60°	91.8	81.4	71.5	60.4	55.8	50.0	40.1	32.0	25.0	20.3	16.9
62.5°	81.4	72.1	61.6	51.7	47.1	41.3	32.0	23.8	17.4	12.8	9.9
65°	73.8	64.5	55.8	45.9	41.8	36.0	27.3	19.8	13.9	9.9	7.0
67.5°	65.1	56.9	48.2	40.1	36.0	31.4	23.2	16.9	11.6	8.1	5.8
70°	54.6	48.2	40.7	33.1	30.2	26.1	19.2	13.9	9.3	6.4	4.6
72.5°	43.6	38.4	32.5	26.7	24.4	20.3	15.7	11.0	7.0	4.6	3.5
75°	33.1	29.1	24.4	20.3	18.0	15.7	11.6	8.1	5.2	3.5	2.3
77.5°	22.7	20.9	17.4	13.9	12.8	11.0	7.6	5.2	3.5	2.3	1.2
80°	15.7	13.9	11.6	9.3	8.1	7.0	4.6	3.5	1.7	1.2	0.6
82.5°	9.9	8.1	7.0	5.8	5.2	4.1	2.9	1.7	1.2	0.6	0.6
85°	5.2	4.6	4.1	2.9	2.9	2.3	1.7	1.2	0.6	0.0	0.0
87.5°	2.9	2.3	1.7	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°	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8
2.5°	611.3	611.3	610.7	617.7	609.5	617.7	613.6	617.7	611.9	611.3	611.9
5°	615.9	617.7	618.3	624.7	617.1	627.0	623.5	627.0	622.9	624.1	625.8
7.5°	625.2	628.1	627.6	635.7	628.1	639.2	636.9	642.1	638.0	639.2	641.5
10°	635.7	639.2	639.8	647.9	640.9	654.3	651.4	657.2	653.7	655.5	658.4
12.5°	647.9	652.0	652.5	661.8	654.3	668.2	666.5	672.3	669.4	671.1	674.6
15°	657.2	663.0	664.2	673.5	665.3	679.9	678.7	686.2	681.6	684.5	687.4
17.5°	661.8	667.1	669.4	678.1	671.1	685.7	684.5	690.9	687.4	690.3	693.8
20°	658.9	665.3	667.1	675.8	668.8	683.3	681.6	688.0	684.5	686.8	690.3
22.5°	648.5	654.9	657.2	665.3	658.9	672.3	671.7	677.5	672.9	675.8	678.7
25°	629.9	636.9	638.0	645.6	638.6	652.5	651.4	657.8	654.3	656.0	660.1
27.5°	603.2	611.3	613.0	619.4	614.2	625.8	625.8	631.0	627.0	627.0	631.0
30°	571.2	579.3	580.5	585.7	581.1	591.5	592.1	597.3	591.0	594.4	595.0
32.5°	532.3	537.5	541.0	545.6	538.7	552.0	550.3	554.3	550.9	550.9	553.8
35°	485.2	491.6	493.3	499.1	493.3	503.8	503.8	506.1	502.6	502.6	507.3
37.5°	434.1	438.7	439.3	445.1	440.5	449.2	448.6	450.3	446.8	449.2	449.2
40°	374.2	377.7	378.9	381.8	381.2	387.6	387.0	388.2	386.4	387.0	388.2
42.5°	304.5	309.1	311.5	313.8	310.3	319.0	317.3	319.0	318.4	319.0	320.8
45°	224.3	227.8	229.5	230.1	228.9	234.2	238.2	234.8	235.3	234.2	236.5
47.5°	162.1	162.7	161.5	165.0	162.1	164.4	165.6	166.2	162.7	162.1	164.4
50°	111.0	113.9	109.8	111.6	111.0	113.3	112.1	112.7	109.2	111.0	109.8
52.5°	73.8	73.2	72.1	72.6	71.5	71.5	71.5	72.6	70.3	69.1	68.0
55°	44.7	43.6	41.3	40.7	40.7	41.3	40.1	38.9	38.9	38.4	38.4
57.5°	26.1	24.4	23.2	22.7	21.5	20.9	20.3	20.3	19.2	19.2	19.2
60°	14.5	12.8	11.6	10.5	10.5	9.9	9.3	8.7	8.7	8.7	8.1
62.5°	7.6	6.4	5.2	4.6	4.6	4.1	3.5	3.5	3.5	3.5	2.9
65°	5.2	4.1	3.5	2.9	2.9	2.3	2.3	2.3	2.3	2.3	2.3
67.5°	4.1	3.5	2.9	2.3	2.3	2.3	1.7	1.7	1.7	1.7	1.7
70°	3.5	2.3	2.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
72.5°	2.3	2.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
75°	1.7	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
80°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	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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**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8
2.5°	617.1	616.5	617.1	618.3	615.9	622.9	619.4	622.9
5°	630.5	631.0	631.6	633.4	630.5	639.2	634.5	639.8
7.5°	647.9	648.5	649.1	650.8	649.1	657.8	652.5	657.2
10°	665.9	667.1	667.1	670.0	668.2	676.4	672.9	678.7
12.5°	682.8	683.9	685.1	686.8	685.7	694.4	691.5	696.1
15°	696.1	698.5	699.0	701.4	700.2	709.5	706.0	710.7
17.5°	702.5	704.8	704.8	707.7	706.6	716.5	711.8	717.0
20°	699.0	700.8	701.4	704.3	703.1	713.0	708.3	714.7
22.5°	688.0	688.6	689.2	692.1	691.5	700.2	696.1	700.2
25°	667.7	669.4	668.8	671.1	671.1	678.1	673.5	677.0
27.5°	638.6	640.3	640.3	643.3	640.9	647.9	643.3	648.5
30°	603.2	604.9	603.7	606.1	603.7	610.7	607.2	609.0
32.5°	560.7	560.7	561.3	561.9	560.7	567.1	563.6	567.1
35°	510.2	511.3	511.9	512.5	511.3	516.0	511.9	514.3
37.5°	453.2	456.1	455.6	456.1	454.4	460.2	456.7	457.9
40°	392.2	392.2	391.6	392.8	391.1	395.7	393.4	394.6
42.5°	321.3	323.1	320.8	323.7	319.0	325.4	323.1	321.3
45°	241.1	238.8	238.2	238.8	237.1	237.7	239.4	238.2
47.5°	164.4	164.4	163.3	161.5	163.9	164.4	162.1	162.1
50°	110.4	110.4	109.2	108.7	109.8	109.2	108.1	109.8
52.5°	70.3	68.0	68.0	69.1	68.0	66.8	68.6	67.4
55°	38.4	37.2	37.2	38.4	37.2	37.2	36.6	37.8
57.5°	18.6	19.2	18.6	18.6	18.6	18.6	18.0	18.6
60°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
62.5°	3.5	3.5	2.9	2.9	2.9	2.9	2.9	2.9
65°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
67.5°	1.7	1.7	1.7	1.7	1.7	2.3	1.7	1.7
70°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
72.5°	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
75°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	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)