

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: P252138

Luminaire Tested: **LD6B10D010 EU6B10209050 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252138  
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 EU6B10209050 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1179.0 lumens  
Efficiency: N/A  
Efficacy: 117.3 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

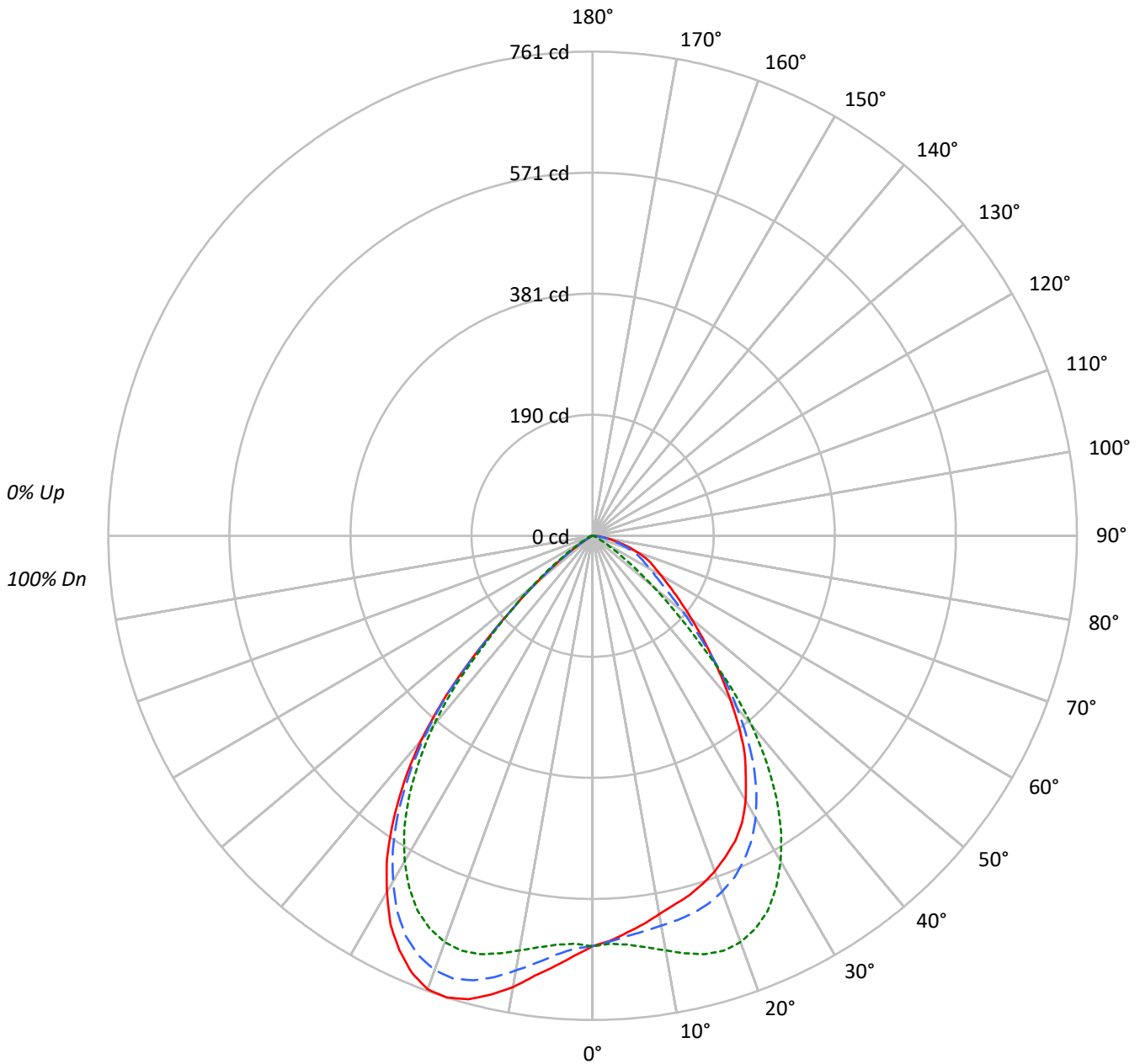
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	42080	42080	42080
5°	40990	42241	44461
10°	39993	43836	47711
15°	39526	45983	50940
20°	38956	47176	52661
25°	38130	46833	51714
30°	36235	44499	48680
35°	33148	40125	43462
40°	28675	33138	35659
45°	24182	21737	23324
50°	20533	12575	11824
55°	17812	6028	4561
60°	16088	2818	1122
65°	15607	1621	386
70°	14001	1297	343
75°	11494	933	151
80°	8566	451	0
85°	7411	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.3	5.3
10°-20°	189.9	16.1
20°-30°	290.1	24.6
30°-40°	303.4	25.7
40°-50°	196.8	16.7
50°-60°	78.1	6.6
60°-70°	37.1	3.1
70°-80°	17.6	1.5
80°-90°	3.6	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°	542.3	46.0
0°-40°	845.7	71.7
0°-60°	1120.7	95.1
0°-90°	1179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1179.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	645	645	645	645	645	
5°	626	631	645	661	679	59
15°	585	614	681	723	754	165
25°	530	563	651	694	718	243
35°	416	442	504	533	546	257
45°	262	260	236	250	253	204
55°	157	133	53	41	40	142
65°	101	84	10	2	2	99
75°	46	37	4	1	1	49
85°	10	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°	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0
2.5°	637.0	638.2	631.4	629.6	634.5	636.4	637.0	635.1	635.8	638.2	638.2
5°	625.9	627.1	621.0	619.1	624.0	625.3	627.1	626.5	628.4	632.1	631.4
7.5°	615.4	617.3	610.5	608.0	614.2	617.3	618.5	618.5	621.0	625.9	626.5
10°	603.7	606.2	600.0	598.8	605.5	608.6	609.2	610.5	614.2	621.0	622.2
12.5°	593.8	596.3	592.0	590.1	597.5	600.6	601.8	604.3	608.6	617.3	618.5
15°	585.2	587.0	582.1	580.9	588.3	592.0	592.6	596.3	601.8	611.7	613.6
17.5°	574.1	575.3	571.6	570.4	577.8	581.5	582.1	586.4	593.2	603.1	606.2
20°	561.1	562.4	558.7	557.4	564.8	569.2	569.8	573.5	581.5	592.0	595.1
22.5°	545.7	548.2	543.9	542.6	550.0	553.7	555.6	558.7	566.7	577.2	581.5
25°	529.7	529.7	526.6	526.0	532.8	537.1	536.5	540.8	548.8	559.3	563.0
27.5°	508.7	508.1	505.0	504.4	511.8	515.5	514.3	518.6	526.0	536.5	540.2
30°	481.0	482.2	477.9	476.7	482.8	489.0	488.4	492.7	500.1	510.0	512.4
32.5°	447.7	448.9	448.3	446.4	452.0	455.1	456.9	460.0	466.2	476.7	479.1
35°	416.2	414.4	411.9	411.9	417.5	422.4	420.5	424.2	430.4	440.9	441.5
37.5°	377.4	376.8	375.5	374.3	380.5	381.7	382.3	384.8	390.3	399.0	397.7
40°	336.7	337.3	336.7	334.2	337.9	342.9	342.2	343.5	348.4	354.6	352.7
42.5°	298.5	298.5	298.5	296.0	300.3	302.8	304.0	303.4	304.6	310.2	307.7
45°	262.1	262.7	262.1	261.5	262.1	263.3	262.1	261.5	261.5	263.3	259.6
47.5°	230.6	230.6	228.8	226.9	228.8	229.4	227.5	225.7	225.1	224.5	218.3
50°	202.3	201.6	201.0	197.9	199.8	200.4	197.9	196.7	194.2	191.2	183.8
52.5°	177.6	177.0	176.4	173.3	174.5	175.1	172.7	170.2	167.1	164.6	155.4
55°	156.6	156.0	156.0	154.2	152.9	154.2	151.7	149.8	145.5	142.4	133.2
57.5°	138.7	138.7	137.5	135.7	136.3	136.3	133.8	131.3	127.6	123.9	116.5
60°	123.3	123.3	123.3	121.5	121.5	121.5	120.2	117.8	114.7	111.0	103.6
62.5°	111.0	111.0	110.4	108.5	109.1	109.1	107.9	105.4	102.4	99.9	92.5
65°	101.1	101.1	101.1	99.3	99.3	99.9	98.7	96.2	93.7	90.6	83.9
67.5°	88.8	88.2	88.2	86.9	87.6	88.2	86.9	85.1	82.0	80.2	74.0
70°	73.4	74.0	74.6	72.8	73.4	73.4	72.8	70.9	69.1	67.2	61.7
72.5°	59.8	59.8	59.2	58.6	58.6	59.2	58.0	56.1	54.9	53.6	49.3
75°	45.6	45.0	45.6	44.4	44.4	44.4	43.2	42.5	41.9	40.1	37.0
77.5°	33.3	32.7	32.7	31.4	32.1	32.1	31.4	30.2	29.0	28.4	25.9
80°	22.8	22.8	22.8	22.2	22.2	21.6	21.6	21.0	19.7	19.1	17.9
82.5°	15.4	15.4	15.4	14.8	14.8	14.8	14.2	13.6	12.9	12.3	11.1
85°	9.9	9.9	9.9	9.2	9.2	9.2	8.6	8.6	8.0	7.4	6.2
87.5°	5.5	5.5	5.5	4.9	4.9	4.9	4.9	4.9	4.3	3.7	3.1
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°	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0
2.5°	642.5	633.9	639.5	639.5	637.6	642.5	645.6	648.1	647.5	641.9	641.3
5°	637.6	630.2	636.4	637.0	635.1	641.9	646.2	649.3	649.9	645.0	645.6
7.5°	633.9	627.7	635.8	638.2	637.6	643.8	648.7	653.6	656.1	652.4	653.0
10°	632.1	627.1	635.8	639.5	640.1	646.9	654.3	661.0	664.1	661.7	663.5
12.5°	629.6	626.5	636.4	641.9	644.4	651.2	660.4	668.4	673.4	672.1	675.8
15°	627.1	624.7	636.4	644.4	647.5	653.6	664.1	675.8	681.4	680.8	685.7
17.5°	621.0	620.3	632.7	641.3	645.6	653.0	662.9	677.1	682.6	683.9	690.0
20°	611.1	611.1	624.7	633.9	638.8	645.6	658.0	671.5	678.3	679.5	686.3
22.5°	597.5	598.8	611.7	621.0	628.4	633.3	646.2	660.4	666.6	668.4	675.8
25°	579.6	580.9	593.2	602.5	610.5	616.0	628.4	641.3	648.7	650.6	656.1
27.5°	556.2	558.7	570.4	579.6	586.4	590.1	603.1	616.6	622.2	624.0	629.6
30°	529.1	529.7	541.4	549.4	556.2	559.3	570.4	584.6	588.9	590.7	598.8
32.5°	495.8	495.2	506.3	513.7	519.2	522.9	534.6	543.9	548.2	551.3	555.6
35°	455.7	455.1	463.1	471.7	476.0	477.3	489.0	498.9	501.3	503.8	509.3
37.5°	410.7	410.7	417.5	421.8	426.7	428.6	434.1	445.2	449.5	448.9	453.2
40°	363.2	360.7	365.7	370.0	371.2	371.8	377.4	386.0	389.1	389.1	392.2
42.5°	313.3	309.6	310.2	312.6	313.9	309.6	313.3	318.8	317.0	319.4	320.0
45°	260.2	254.7	252.2	246.7	247.9	243.6	241.1	242.3	241.7	235.6	236.8
47.5°	217.1	207.2	202.9	194.9	193.0	188.1	185.0	179.4	174.5	174.5	171.4
50°	180.7	170.8	162.2	152.9	149.8	145.5	138.7	131.3	127.6	123.9	120.9
52.5°	151.7	141.2	130.7	120.9	116.5	111.0	101.7	94.3	87.6	83.9	80.2
55°	128.3	116.5	105.4	95.0	89.4	83.9	74.6	66.0	58.0	53.0	49.9
57.5°	110.4	99.3	87.6	76.5	71.5	65.4	55.5	46.2	38.8	33.3	30.2
60°	97.4	86.3	75.8	64.1	59.2	53.0	42.5	33.9	26.5	21.6	17.9
62.5°	86.3	76.5	65.4	54.9	49.9	43.8	33.9	25.3	18.5	13.6	10.5
65°	78.3	68.4	59.2	48.7	44.4	38.2	29.0	21.0	14.8	10.5	7.4
67.5°	69.1	60.4	51.2	42.5	38.2	33.3	24.7	17.9	12.3	8.6	6.2
70°	58.0	51.2	43.2	35.1	32.1	27.7	20.3	14.8	9.9	6.8	4.9
72.5°	46.2	40.7	34.5	28.4	25.9	21.6	16.6	11.7	7.4	4.9	3.7
75°	35.1	30.8	25.9	21.6	19.1	16.6	12.3	8.6	5.5	3.7	2.5
77.5°	24.0	22.2	18.5	14.8	13.6	11.7	8.0	5.5	3.7	2.5	1.2
80°	16.6	14.8	12.3	9.9	8.6	7.4	4.9	3.7	1.8	1.2	0.6
82.5°	10.5	8.6	7.4	6.2	5.5	4.3	3.1	1.8	1.2	0.6	0.6
85°	5.5	4.9	4.3	3.1	3.1	2.5	1.8	1.2	0.6	0.0	0.0
87.5°	3.1	2.5	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°	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0
2.5°	648.7	648.7	648.1	655.5	646.9	655.5	651.2	655.5	649.3	648.7	649.3
5°	653.6	655.5	656.1	662.9	654.9	665.4	661.7	665.4	661.0	662.3	664.1
7.5°	663.5	666.6	666.0	674.6	666.6	678.3	675.8	681.4	677.1	678.3	680.8
10°	674.6	678.3	678.9	687.6	680.2	694.3	691.3	697.4	693.7	695.6	698.7
12.5°	687.6	691.9	692.5	702.4	694.3	709.1	707.3	713.5	710.4	712.2	715.9
15°	697.4	703.6	704.8	714.7	706.1	721.5	720.2	728.3	723.3	726.4	729.5
17.5°	702.4	707.9	710.4	719.6	712.2	727.6	726.4	733.2	729.5	732.6	736.3
20°	699.3	706.1	707.9	717.2	709.8	725.2	723.3	730.1	726.4	728.9	732.6
22.5°	688.2	695.0	697.4	706.1	699.3	713.5	712.8	719.0	714.1	717.2	720.2
25°	668.4	675.8	677.1	685.1	677.7	692.5	691.3	698.0	694.3	696.2	700.5
27.5°	640.1	648.7	650.6	657.3	651.8	664.1	664.1	669.7	665.4	665.4	669.7
30°	606.2	614.8	616.0	621.6	616.6	627.7	628.4	633.9	627.1	630.8	631.4
32.5°	564.8	570.4	574.1	579.0	571.6	585.8	584.0	588.3	584.6	584.6	587.7
35°	514.9	521.7	523.5	529.7	523.5	534.6	534.6	537.1	533.4	533.4	538.3
37.5°	460.6	465.6	466.2	472.3	467.4	476.7	476.0	477.9	474.2	476.7	476.7
40°	397.1	400.8	402.0	405.1	404.5	411.3	410.7	411.9	410.1	410.7	411.9
42.5°	323.1	328.1	330.5	333.0	329.3	338.5	336.7	338.5	337.9	338.5	340.4
45°	238.0	241.7	243.6	244.2	243.0	248.5	252.8	249.1	249.7	248.5	251.0
47.5°	172.0	172.7	171.4	175.1	172.0	174.5	175.7	176.4	172.7	172.0	174.5
50°	117.8	120.9	116.5	118.4	117.8	120.2	119.0	119.6	115.9	117.8	116.5
52.5°	78.3	77.7	76.5	77.1	75.8	75.8	75.8	77.1	74.6	73.4	72.1
55°	47.5	46.2	43.8	43.2	43.2	43.8	42.5	41.3	41.3	40.7	40.7
57.5°	27.7	25.9	24.7	24.0	22.8	22.2	21.6	21.6	20.3	20.3	20.3
60°	15.4	13.6	12.3	11.1	11.1	10.5	9.9	9.2	9.2	9.2	8.6
62.5°	8.0	6.8	5.5	4.9	4.9	4.3	3.7	3.7	3.7	3.7	3.1
65°	5.5	4.3	3.7	3.1	3.1	2.5	2.5	2.5	2.5	2.5	2.5
67.5°	4.3	3.7	3.1	2.5	2.5	2.5	1.8	1.8	1.8	1.8	1.8
70°	3.7	2.5	2.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
72.5°	2.5	2.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
75°	1.8	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°	645.0	645.0	645.0	645.0	645.0	645.0	645.0	645.0
2.5°	654.9	654.3	654.9	656.1	653.6	661.0	657.3	661.0
5°	669.1	669.7	670.3	672.1	669.1	678.3	673.4	678.9
7.5°	687.6	688.2	688.8	690.6	688.8	698.0	692.5	697.4
10°	706.7	707.9	707.9	711.0	709.1	717.8	714.1	720.2
12.5°	724.6	725.8	727.0	728.9	727.6	736.9	733.8	738.7
15°	738.7	741.2	741.8	744.3	743.1	752.9	749.2	754.2
17.5°	745.5	748.0	748.0	751.1	749.8	760.3	755.4	760.9
20°	741.8	743.7	744.3	747.4	746.1	756.6	751.7	758.5
22.5°	730.1	730.7	731.3	734.4	733.8	743.1	738.7	743.1
25°	708.5	710.4	709.8	712.2	712.2	719.6	714.7	718.4
27.5°	677.7	679.5	679.5	682.6	680.2	687.6	682.6	688.2
30°	640.1	641.9	640.7	643.2	640.7	648.1	644.4	646.2
32.5°	595.1	595.1	595.7	596.3	595.1	601.8	598.1	601.8
35°	541.4	542.6	543.3	543.9	542.6	547.6	543.3	545.7
37.5°	481.0	484.1	483.4	484.1	482.2	488.4	484.7	485.9
40°	416.2	416.2	415.6	416.8	415.0	419.9	417.5	418.7
42.5°	341.0	342.9	340.4	343.5	338.5	345.3	342.9	341.0
45°	255.9	253.4	252.8	253.4	251.6	252.2	254.1	252.8
47.5°	174.5	174.5	173.3	171.4	173.9	174.5	172.0	172.0
50°	117.2	117.2	115.9	115.3	116.5	115.9	114.7	116.5
52.5°	74.6	72.1	72.1	73.4	72.1	70.9	72.8	71.5
55°	40.7	39.5	39.5	40.7	39.5	39.5	38.8	40.1
57.5°	19.7	20.3	19.7	19.7	19.7	19.7	19.1	19.7
60°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
62.5°	3.7	3.7	3.1	3.1	3.1	3.1	3.1	3.1
65°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
67.5°	1.8	1.8	1.8	1.8	1.8	2.5	1.8	1.8
70°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
72.5°	1.8	1.8	2.5	2.5	2.5	2.5	2.5	2.5
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)