

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: P252256

Luminaire Tested: **LD6B15D010 EU6B10209727 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252256  
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: io LED  
Catalog Number: LD6B15D010 EU6B10209727 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: 968.0 lumens  
Efficiency: N/A  
Efficacy: 67.3 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

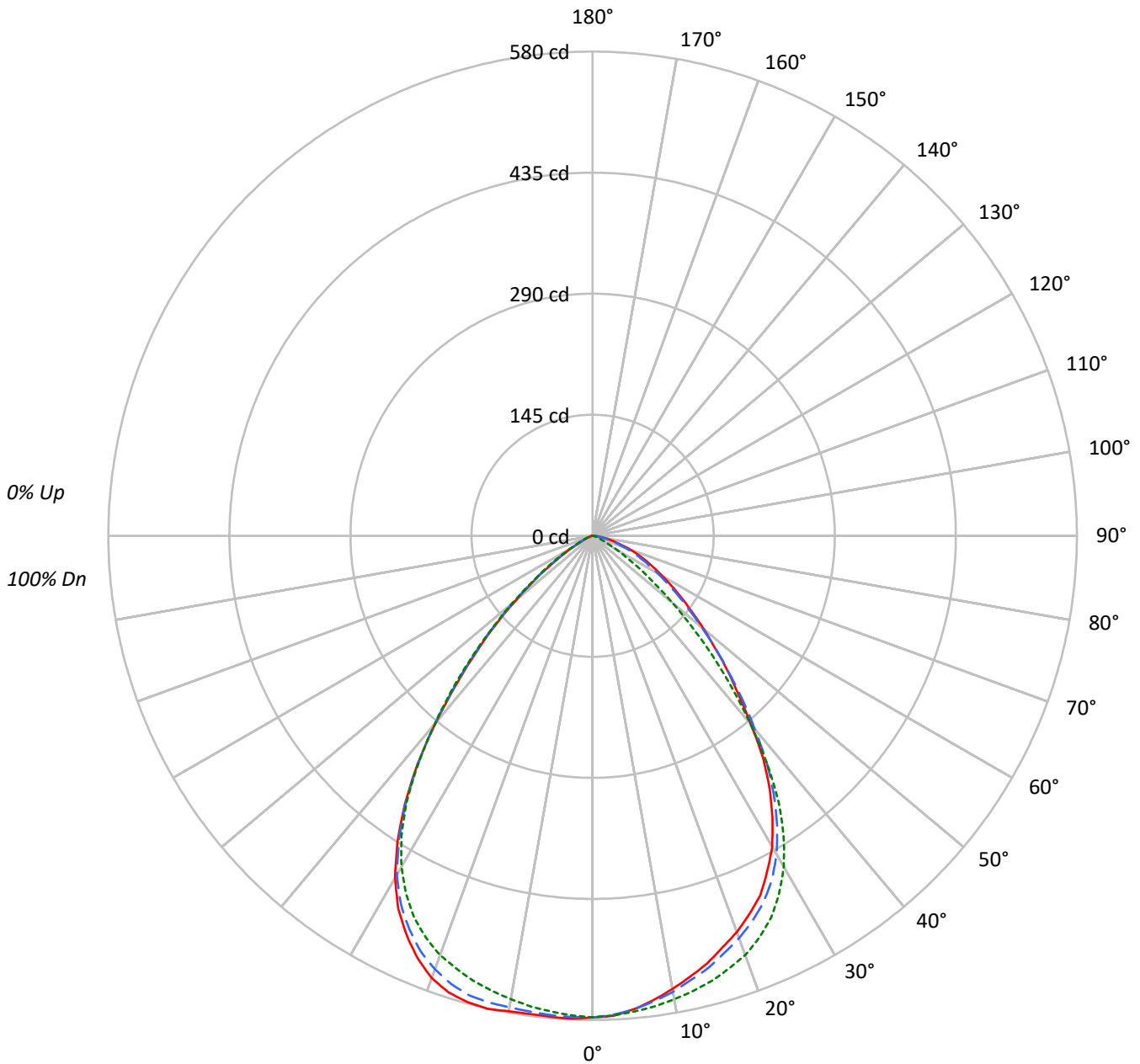
Input Watts (W): 14.39  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	102	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°	37644	37644	37644
5°	37283	37467	37879
10°	36515	37343	38317
15°	35818	37276	39066
20°	35075	37109	39136
25°	34207	36367	37972
30°	32393	34488	35648
35°	29413	30910	31189
40°	25107	24988	24868
45°	21092	18711	18130
50°	17610	12657	12027
55°	14821	7769	7052
60°	12552	4097	3549
65°	10868	2146	1714
70°	9042	1335	935
75°	6680	882	529
80°	5222	526	263
85°	4192	524	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.4	5.6
10°-20°	155.7	16.1
20°-30°	229.9	23.8
30°-40°	236.9	24.5
40°-50°	163.7	16.9
50°-60°	80.7	8.3
60°-70°	32.7	3.4
70°-80°	11.7	1.2
80°-90°	2.4	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°	440.0	45.5
0°-40°	676.9	69.9
0°-60°	921.3	95.2
0°-90°	968.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	968.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	577	577	577	577	577	
5°	569	569	572	576	578	54
15°	530	536	552	570	578	149
25°	475	484	505	520	528	217
35°	369	378	388	390	392	229
45°	229	230	203	200	196	177
55°	130	125	68	64	62	118
65°	70	63	14	11	11	70
75°	26	22	4	2	2	30
85°	6	4	1	0	0	7
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°	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0
2.5°	575.6	573.5	574.9	572.1	575.6	572.1	572.8	573.5	572.8	573.5	574.2
5°	569.3	567.2	569.3	565.8	569.3	567.2	567.2	567.9	567.9	568.6	569.3
7.5°	561.0	558.9	561.0	557.5	561.7	559.6	559.6	561.0	560.3	561.0	562.4
10°	551.2	548.4	550.5	548.4	552.6	549.8	551.2	551.2	551.2	553.3	554.7
12.5°	540.8	538.0	540.8	537.3	541.4	539.4	540.1	542.1	542.8	544.2	544.9
15°	530.3	526.8	528.2	526.1	530.3	528.2	528.9	531.7	531.7	533.8	535.9
17.5°	517.1	514.3	517.1	514.3	517.8	516.4	517.8	519.8	519.8	521.9	524.0
20°	505.2	502.4	504.5	502.4	506.6	504.5	505.2	508.0	508.7	510.8	512.9
22.5°	490.6	488.5	489.9	487.8	492.0	490.6	491.3	494.1	494.8	496.2	499.6
25°	475.2	471.1	473.2	471.8	475.9	473.9	475.2	478.0	479.4	481.5	484.3
27.5°	452.9	450.9	452.3	452.3	455.7	453.6	454.3	457.1	459.2	461.3	464.8
30°	430.0	426.5	427.9	428.6	431.3	430.0	431.3	434.1	434.8	437.6	440.4
32.5°	400.7	399.3	402.1	400.7	402.1	402.1	402.8	404.9	406.3	407.7	411.1
35°	369.3	366.5	369.3	367.9	371.4	369.3	371.4	373.5	373.5	376.3	378.4
37.5°	335.2	331.7	333.1	333.1	334.5	333.8	333.8	337.3	338.0	340.1	342.2
40°	294.8	293.4	296.2	295.5	296.2	296.2	296.9	298.9	300.3	301.0	301.7
42.5°	258.5	259.2	259.9	259.9	259.9	259.9	259.9	262.7	262.0	264.1	264.8
45°	228.6	225.8	227.2	226.5	228.6	226.5	228.6	230.7	229.3	231.4	230.0
47.5°	197.9	197.9	197.9	197.2	198.6	197.9	199.3	200.0	200.0	200.0	199.3
50°	173.5	171.4	172.1	172.1	172.8	172.1	173.5	174.2	174.2	172.8	170.0
52.5°	149.8	149.1	149.1	150.5	150.5	149.8	149.8	149.8	149.8	147.7	146.3
55°	130.3	128.9	129.6	129.6	129.6	129.6	130.3	129.6	129.6	127.5	125.4
57.5°	112.9	111.5	111.5	111.5	112.2	111.5	111.5	111.5	110.8	108.7	105.9
60°	96.2	95.5	96.2	96.2	96.9	96.2	96.2	96.2	94.8	92.7	89.9
62.5°	82.2	82.2	82.2	82.9	82.9	82.2	82.2	81.5	80.8	78.0	75.3
65°	70.4	69.7	70.4	70.4	71.1	71.1	70.4	69.7	69.0	66.2	63.4
67.5°	58.5	57.8	58.5	58.5	59.2	58.5	58.5	58.5	56.4	55.1	52.3
70°	47.4	46.7	46.7	46.7	47.4	46.0	46.7	46.7	45.3	43.2	40.4
72.5°	36.2	36.2	36.2	36.2	36.2	36.2	35.5	35.5	34.1	32.1	30.7
75°	26.5	26.5	27.2	27.2	26.5	26.5	26.5	25.8	25.1	23.7	22.3
77.5°	19.5	19.5	19.5	19.5	18.8	18.8	18.8	18.1	17.4	16.7	15.3
80°	13.9	13.9	13.9	13.2	13.9	13.2	13.2	13.2	11.8	11.1	10.5
82.5°	9.8	9.1	9.1	9.1	9.1	9.1	9.1	8.4	8.4	7.7	7.0
85°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.9	4.2	4.2
87.5°	2.8	3.5	3.5	3.5	3.5	3.5	3.5	2.8	2.8	2.8	2.1
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°	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0
2.5°	574.2	574.2	575.6	573.5	577.0	574.9	574.2	577.7	575.6	574.9	576.3
5°	569.3	570.0	570.7	569.3	572.8	570.7	570.7	574.2	572.8	572.1	574.2
7.5°	563.1	563.7	565.1	564.4	567.2	565.8	566.5	570.0	568.6	568.6	570.7
10°	555.4	556.8	558.2	558.2	561.7	560.3	560.3	564.4	563.1	563.7	566.5
12.5°	546.3	548.4	550.5	551.2	554.7	552.6	553.3	558.2	557.5	558.2	561.0
15°	536.6	539.4	541.4	541.4	545.6	543.5	545.6	550.5	549.1	551.9	555.4
17.5°	525.4	528.2	531.0	531.7	535.9	534.5	537.3	542.1	542.1	543.5	547.7
20°	515.0	518.5	519.8	521.9	526.1	525.4	526.8	532.4	532.4	534.5	538.7
22.5°	501.0	504.5	507.3	509.4	512.9	512.9	515.0	519.8	519.8	521.2	525.4
25°	485.7	489.9	492.0	494.1	497.5	496.9	498.9	503.1	503.8	505.2	509.4
27.5°	466.2	469.7	472.5	473.9	478.7	475.9	478.0	482.9	482.2	483.6	487.1
30°	441.8	445.3	448.1	448.1	452.3	452.3	454.3	456.4	456.4	457.8	460.6
32.5°	413.2	417.4	417.4	419.5	422.3	419.5	422.3	425.1	423.7	425.8	427.9
35°	380.5	382.6	383.3	383.3	385.4	384.7	384.0	386.1	384.7	388.1	390.2
37.5°	340.8	343.5	342.2	343.5	342.8	340.8	340.8	344.2	341.5	342.2	344.2
40°	302.4	302.4	301.7	298.2	298.9	296.9	296.2	296.9	294.1	293.4	296.2
42.5°	262.7	262.0	259.9	255.0	255.7	252.3	249.5	249.5	248.1	247.4	248.1
45°	227.2	225.1	221.6	216.0	214.6	211.8	206.3	204.9	202.8	202.8	203.5
47.5°	194.4	191.6	186.1	179.8	176.3	172.8	167.2	165.2	161.7	160.3	161.7
50°	167.2	162.4	155.4	146.3	142.9	138.7	133.1	129.6	126.1	124.7	124.0
52.5°	142.2	135.2	128.2	117.1	114.3	110.1	102.4	99.0	95.5	92.7	92.7
55°	120.6	114.3	104.5	94.1	89.9	85.7	78.0	73.2	69.7	68.3	66.9
57.5°	101.0	94.1	85.0	73.9	69.7	65.5	57.8	53.0	49.5	47.4	46.0
60°	85.0	77.3	68.3	58.5	53.7	49.5	41.8	36.9	33.4	31.4	30.0
62.5°	69.7	63.4	54.4	45.3	41.1	36.9	30.7	25.8	22.3	20.9	18.8
65°	58.5	52.3	43.9	36.2	32.8	28.6	23.0	18.8	16.0	13.9	12.5
67.5°	47.4	42.5	35.5	28.6	25.1	22.3	17.4	13.9	11.1	9.8	9.1
70°	37.6	32.8	27.2	21.6	19.5	16.7	13.2	9.8	8.4	7.0	6.3
72.5°	27.9	24.4	20.2	16.0	13.9	12.5	9.1	7.7	5.6	4.9	4.2
75°	20.2	17.4	14.6	11.1	9.8	9.1	7.0	4.9	4.2	3.5	2.8
77.5°	13.9	12.5	9.8	7.7	7.0	6.3	4.9	3.5	2.8	2.1	2.1
80°	9.1	7.7	6.3	4.9	4.9	4.2	2.8	2.1	2.1	1.4	1.4
82.5°	5.6	4.9	4.2	3.5	2.8	2.8	2.1	1.4	1.4	0.7	0.7
85°	3.5	2.8	2.1	2.1	1.4	1.4	1.4	0.7	0.7	0.7	0.7
87.5°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	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°	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0
2.5°	576.3	576.3	577.7	575.6	577.0	577.0	578.4	575.6	577.0	577.7	579.1
5°	573.5	574.2	575.6	574.9	575.6	575.6	577.0	573.5	576.3	576.3	578.4
7.5°	570.7	570.7	572.1	571.4	572.8	573.5	574.9	572.1	574.9	574.9	577.0
10°	567.2	567.2	569.3	568.6	570.7	571.4	573.5	570.7	573.5	574.2	576.3
12.5°	562.4	563.1	565.1	565.1	567.2	568.6	570.7	569.3	572.8	573.5	576.3
15°	556.8	558.2	561.0	560.3	562.4	564.4	567.2	565.1	570.0	571.4	574.2
17.5°	549.8	551.2	553.3	553.3	555.4	556.8	560.3	558.9	563.1	563.7	567.2
20°	539.4	541.4	544.2	543.5	545.6	547.0	549.8	548.4	552.6	554.0	557.5
22.5°	526.8	528.2	530.3	530.3	532.4	533.8	536.6	534.5	538.7	539.4	542.1
25°	510.1	511.5	512.9	513.6	515.7	516.4	517.8	516.4	519.8	520.5	524.0
27.5°	488.5	489.2	491.3	491.3	492.7	493.4	495.5	492.7	497.5	497.5	499.6
30°	462.7	462.0	464.8	463.4	464.8	464.8	466.9	465.5	469.0	467.6	469.7
32.5°	428.6	430.0	430.0	428.6	431.3	430.7	430.7	429.3	431.3	432.0	433.4
35°	388.8	390.9	390.9	391.6	392.3	390.2	390.9	386.7	390.2	390.9	391.6
37.5°	345.6	343.5	344.9	342.8	346.3	342.2	342.2	339.4	342.2	342.2	342.8
40°	296.2	295.5	296.9	295.5	294.8	294.1	292.7	290.6	293.4	292.0	294.1
42.5°	249.5	248.8	248.8	247.4	246.7	246.7	245.3	243.9	243.2	243.2	246.7
45°	201.4	202.8	201.4	200.7	202.1	200.7	201.4	198.6	200.0	198.6	200.0
47.5°	161.0	161.7	160.3	158.9	161.0	158.9	158.9	156.8	159.6	159.6	158.2
50°	124.7	124.0	122.6	124.0	123.3	123.3	123.3	121.3	122.6	120.6	121.9
52.5°	92.0	91.3	91.3	90.6	91.3	90.6	90.6	89.9	89.9	89.2	89.9
55°	66.9	66.2	64.8	64.8	64.8	65.5	64.8	64.1	64.1	63.4	64.1
57.5°	45.3	43.9	43.9	43.9	43.9	43.2	43.2	42.5	43.2	42.5	43.2
60°	29.3	29.3	27.9	27.9	27.9	27.9	27.9	27.2	27.9	27.9	27.9
62.5°	18.1	18.1	17.4	16.7	17.4	16.7	16.7	16.7	17.4	16.7	17.4
65°	11.8	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
67.5°	8.4	7.7	7.7	7.7	7.7	7.7	7.7	7.0	7.7	7.7	7.7
70°	5.6	5.6	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
72.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
75°	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
85°	0.7	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	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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°	577.0	577.0	577.0	577.0	577.0	577.0	577.0	577.0
2.5°	577.0	577.7	576.3	577.0	575.6	577.0	577.7	579.1
5°	575.6	576.3	574.9	576.3	574.9	576.3	577.0	578.4
7.5°	574.2	575.6	574.2	575.6	574.2	575.6	576.3	577.7
10°	574.2	576.3	574.9	577.0	574.9	576.3	577.7	578.4
12.5°	574.2	576.3	575.6	577.0	576.3	577.7	579.1	580.5
15°	572.8	574.9	573.5	575.6	574.9	575.6	578.4	578.4
17.5°	565.1	567.2	567.2	568.6	568.6	570.7	572.1	573.5
20°	555.4	557.5	556.8	558.9	558.9	561.0	562.4	563.7
22.5°	540.8	543.5	542.8	544.9	544.2	545.6	548.4	547.7
25°	521.9	525.4	524.7	526.1	525.4	525.4	526.8	527.5
27.5°	498.9	501.0	500.3	501.7	500.3	501.7	503.1	503.8
30°	469.0	470.4	469.7	470.4	469.7	471.1	471.8	473.2
32.5°	432.7	434.8	432.7	434.1	433.4	433.4	436.2	434.8
35°	389.5	390.2	390.9	390.9	389.5	390.2	391.6	391.6
37.5°	341.5	344.9	340.8	342.8	342.2	342.2	342.2	344.2
40°	291.3	292.0	290.6	290.6	290.6	289.9	292.7	292.0
42.5°	243.9	244.6	243.9	241.8	242.5	242.5	244.6	241.8
45°	197.9	199.3	198.6	198.6	197.2	197.2	197.9	196.5
47.5°	156.8	158.2	156.1	156.8	155.4	156.8	156.1	157.5
50°	119.2	120.6	119.9	120.6	120.6	119.2	121.3	118.5
52.5°	89.2	89.9	89.2	88.5	87.8	87.8	89.2	88.5
55°	63.4	62.7	62.7	62.7	63.4	63.4	62.7	62.0
57.5°	42.5	42.5	41.8	41.8	42.5	41.1	41.8	41.1
60°	27.2	27.2	27.2	27.2	26.5	27.2	27.2	27.2
62.5°	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7
65°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
67.5°	7.0	7.7	7.7	7.7	7.0	7.0	7.0	7.0
70°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
72.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	0.7	0.7	0.7	0.7	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)