

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: P252254

Luminaire Tested: **LD6B15D010 EU6B10209040 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252254
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 EU6B10209040 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1176.0 lumens
Efficiency: N/A
Efficacy: 81.7 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

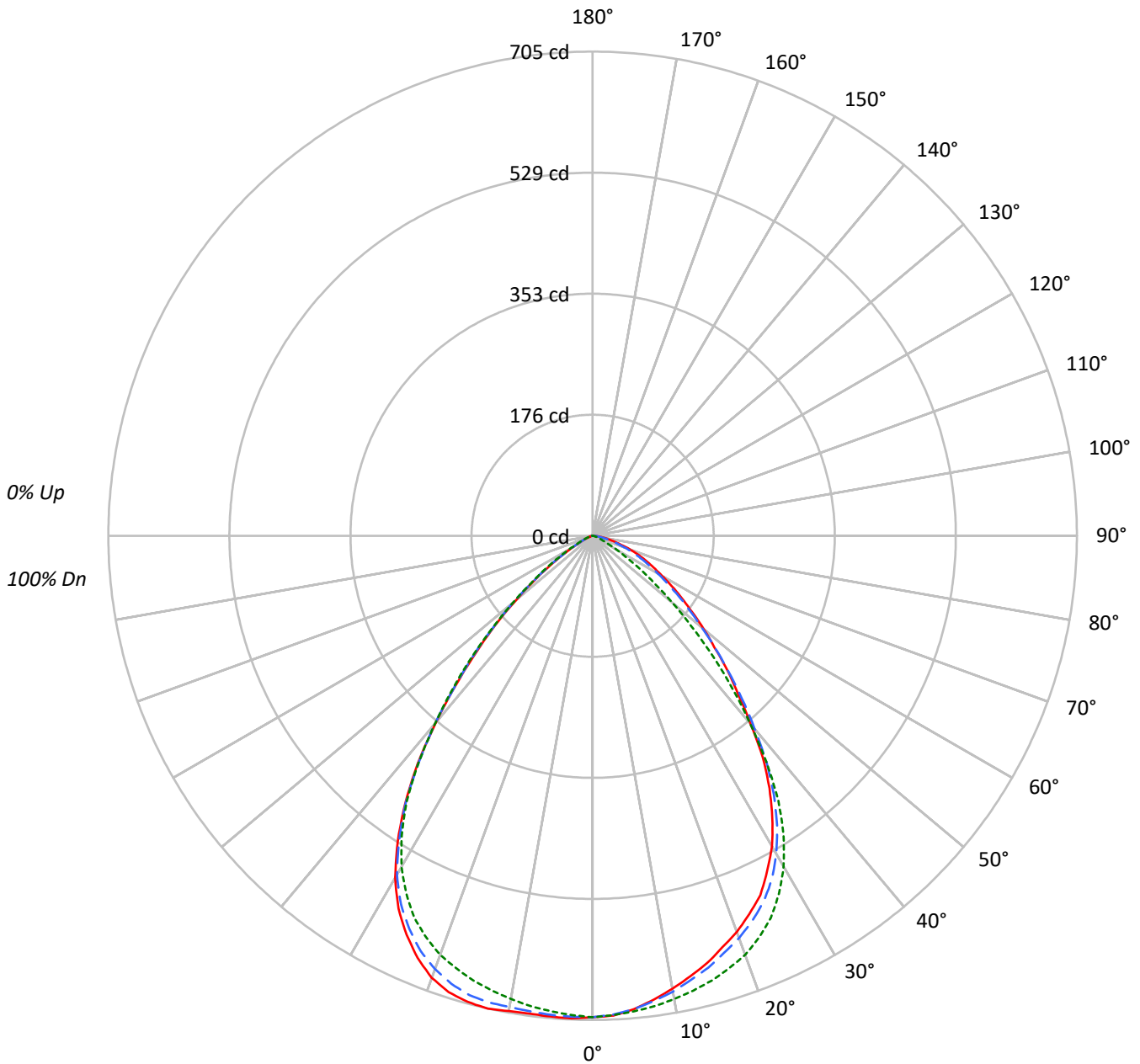
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	45734	45734	45734
5°	45299	45515	46020
10°	44359	45373	46552
15°	43511	45287	47462
20°	42615	45079	47551
25°	41564	44184	46135
30°	39347	41900	43302
35°	35736	37552	37895
40°	30498	30353	30208
45°	25622	22734	22023
50°	21395	15377	14605
55°	18006	9441	8565
60°	15240	4971	4306
65°	13199	2609	2084
70°	10987	1621	1125
75°	8117	1059	630
80°	6349	639	301
85°	5090	599	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	5.6
10°-20°	189.2	16.1
20°-30°	279.3	23.8
30°-40°	287.9	24.5
40°-50°	198.8	16.9
50°-60°	98.0	8.3
60°-70°	39.7	3.4
70°-80°	14.1	1.2
80°-90°	2.9	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°	534.5	45.5
0°-40°	822.4	69.9
0°-60°	1119.2	95.2
0°-90°	1176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1176.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	701	701	701	701	701	
5°	692	692	695	700	703	65
15°	644	651	670	692	703	181
25°	577	588	614	632	641	264
35°	449	460	472	474	476	278
45°	278	279	246	243	239	215
55°	158	152	83	78	75	143
65°	86	77	17	14	14	85
75°	32	27	4	2	2	36
85°	7	5	1	0	0	8
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°	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0
2.5°	699.3	696.7	698.4	695.0	699.3	695.0	695.9	696.7	695.9	696.7	697.6
5°	691.7	689.1	691.7	687.4	691.7	689.1	689.1	690.0	690.0	690.8	691.7
7.5°	681.5	679.0	681.5	677.3	682.3	679.8	679.8	681.5	680.7	681.5	683.2
10°	669.6	666.3	668.8	666.3	671.3	668.0	669.6	669.6	669.6	672.2	673.9
12.5°	656.9	653.6	656.9	652.7	657.8	655.3	656.1	658.6	659.5	661.2	662.0
15°	644.2	640.0	641.7	639.2	644.2	641.7	642.6	645.9	645.9	648.5	651.0
17.5°	628.2	624.8	628.2	624.8	629.0	627.3	629.0	631.5	631.5	634.1	636.6
20°	613.8	610.4	612.9	610.4	615.5	612.9	613.8	617.2	618.0	620.5	623.1
22.5°	596.0	593.5	595.1	592.6	597.7	596.0	596.8	600.2	601.1	602.8	607.0
25°	577.4	572.3	574.8	573.1	578.2	575.7	577.4	580.8	582.4	585.0	588.4
27.5°	550.3	547.7	549.4	549.4	553.7	551.1	552.0	555.4	557.9	560.4	564.7
30°	522.3	518.1	519.8	520.6	524.0	522.3	524.0	527.4	528.3	531.7	535.0
32.5°	486.8	485.1	488.5	486.8	488.5	488.5	489.3	491.9	493.6	495.2	499.5
35°	448.7	445.3	448.7	447.0	451.2	448.7	451.2	453.8	453.8	457.2	459.7
37.5°	407.2	403.0	404.7	404.7	406.4	405.5	405.5	409.7	410.6	413.1	415.7
40°	358.1	356.4	359.8	358.9	359.8	359.8	360.6	363.2	364.9	365.7	366.6
42.5°	314.1	314.9	315.8	315.8	315.8	315.8	315.8	319.2	318.3	320.9	321.7
45°	277.7	274.3	276.0	275.1	277.7	275.1	277.7	280.2	278.5	281.1	279.4
47.5°	240.4	240.4	240.4	239.6	241.3	240.4	242.1	243.0	243.0	243.0	242.1
50°	210.8	208.3	209.1	209.1	210.0	209.1	210.8	211.6	211.6	210.0	206.6
52.5°	182.0	181.2	181.2	182.9	182.9	182.0	182.0	182.0	182.0	179.5	177.8
55°	158.3	156.6	157.5	157.5	157.5	157.5	158.3	157.5	157.5	154.9	152.4
57.5°	137.1	135.5	135.5	135.5	136.3	135.5	135.5	135.5	134.6	132.1	128.7
60°	116.8	116.0	116.8	116.8	117.7	116.8	116.8	116.8	115.1	112.6	109.2
62.5°	99.9	99.9	99.9	100.7	100.7	99.9	99.9	99.0	98.2	94.8	91.4
65°	85.5	84.7	85.5	85.5	86.4	86.4	85.5	84.7	83.8	80.4	77.0
67.5°	71.1	70.3	71.1	71.1	72.0	71.1	71.1	71.1	68.6	66.9	63.5
70°	57.6	56.7	56.7	56.7	57.6	55.9	56.7	56.7	55.0	52.5	49.1
72.5°	44.0	44.0	44.0	44.0	44.0	44.0	43.2	43.2	41.5	38.9	37.2
75°	32.2	32.2	33.0	33.0	32.2	32.2	32.2	31.3	30.5	28.8	27.1
77.5°	23.7	23.7	23.7	23.7	22.9	22.9	22.9	22.0	21.2	20.3	18.6
80°	16.9	16.9	16.9	16.1	16.9	16.1	16.1	16.1	14.4	13.5	12.7
82.5°	11.9	11.0	11.0	11.0	11.0	11.0	11.0	10.2	10.2	9.3	8.5
85°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	5.9	5.1	5.1
87.5°	3.4	4.2	4.2	4.2	4.2	4.2	4.2	3.4	3.4	3.4	2.5
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°	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0
2.5°	697.6	697.6	699.3	696.7	701.0	698.4	697.6	701.8	699.3	698.4	700.1
5°	691.7	692.5	693.3	691.7	695.9	693.3	693.3	697.6	695.9	695.0	697.6
7.5°	684.0	684.9	686.6	685.7	689.1	687.4	688.3	692.5	690.8	690.8	693.3
10°	674.7	676.4	678.1	678.1	682.3	680.7	680.7	685.7	684.0	684.9	688.3
12.5°	663.7	666.3	668.8	669.6	673.9	671.3	672.2	678.1	677.3	678.1	681.5
15°	651.9	655.3	657.8	657.8	662.9	660.3	662.9	668.8	667.1	670.5	674.7
17.5°	638.3	641.7	645.1	645.9	651.0	649.3	652.7	658.6	658.6	660.3	665.4
20°	625.6	629.9	631.5	634.1	639.2	638.3	640.0	646.8	646.8	649.3	654.4
22.5°	608.7	612.9	616.3	618.9	623.1	623.1	625.6	631.5	631.5	633.2	638.3
25°	590.1	595.1	597.7	600.2	604.5	603.6	606.2	611.2	612.1	613.8	618.9
27.5°	566.4	570.6	574.0	575.7	581.6	578.2	580.8	586.7	585.8	587.5	591.8
30°	536.7	541.0	544.4	544.4	549.4	549.4	552.0	554.5	554.5	556.2	559.6
32.5°	502.0	507.1	507.1	509.6	513.0	509.6	513.0	516.4	514.7	517.3	519.8
35°	462.2	464.8	465.6	465.6	468.2	467.3	466.5	469.0	467.3	471.5	474.1
37.5°	414.0	417.4	415.7	417.4	416.5	414.0	414.0	418.2	414.8	415.7	418.2
40°	367.4	367.4	366.6	362.3	363.2	360.6	359.8	360.6	357.3	356.4	359.8
42.5°	319.2	318.3	315.8	309.8	310.7	306.5	303.1	303.1	301.4	300.5	301.4
45°	276.0	273.4	269.2	262.4	260.7	257.4	250.6	248.9	246.4	246.4	247.2
47.5°	236.2	232.8	226.0	218.4	214.2	210.0	203.2	200.6	196.4	194.7	196.4
50°	203.2	197.3	188.8	177.8	173.5	168.5	161.7	157.5	153.2	151.5	150.7
52.5°	172.7	164.2	155.8	142.2	138.8	133.8	124.4	120.2	116.0	112.6	112.6
55°	146.5	138.8	127.0	114.3	109.2	104.1	94.8	88.9	84.7	83.0	81.3
57.5°	122.8	114.3	103.3	89.7	84.7	79.6	70.3	64.3	60.1	57.6	55.9
60°	103.3	94.0	83.0	71.1	65.2	60.1	50.8	44.9	40.6	38.1	36.4
62.5°	84.7	77.0	66.0	55.0	49.9	44.9	37.2	31.3	27.1	25.4	22.9
65°	71.1	63.5	53.3	44.0	39.8	34.7	27.9	22.9	19.5	16.9	15.2
67.5°	57.6	51.6	43.2	34.7	30.5	27.1	21.2	16.9	13.5	11.9	11.0
70°	45.7	39.8	33.0	26.2	23.7	20.3	16.1	11.9	10.2	8.5	7.6
72.5°	33.9	29.6	24.6	19.5	16.9	15.2	11.0	9.3	6.8	5.9	5.1
75°	24.6	21.2	17.8	13.5	11.9	11.0	8.5	5.9	5.1	4.2	3.4
77.5°	16.9	15.2	11.9	9.3	8.5	7.6	5.9	4.2	3.4	2.5	2.5
80°	11.0	9.3	7.6	5.9	5.9	5.1	3.4	2.5	2.5	1.7	1.7
82.5°	6.8	5.9	5.1	4.2	3.4	3.4	2.5	1.7	1.7	0.8	0.8
85°	4.2	3.4	2.5	2.5	1.7	1.7	1.7	0.8	0.8	0.8	0.8
87.5°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	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°	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0
2.5°	700.1	700.1	701.8	699.3	701.0	701.0	702.7	699.3	701.0	701.8	703.5
5°	696.7	697.6	699.3	698.4	699.3	699.3	701.0	696.7	700.1	700.1	702.7
7.5°	693.3	693.3	695.0	694.2	695.9	696.7	698.4	695.0	698.4	698.4	701.0
10°	689.1	689.1	691.7	690.8	693.3	694.2	696.7	693.3	696.7	697.6	700.1
12.5°	683.2	684.0	686.6	686.6	689.1	690.8	693.3	691.7	695.9	696.7	700.1
15°	676.4	678.1	681.5	680.7	683.2	685.7	689.1	686.6	692.5	694.2	697.6
17.5°	668.0	669.6	672.2	672.2	674.7	676.4	680.7	679.0	684.0	684.9	689.1
20°	655.3	657.8	661.2	660.3	662.9	664.6	668.0	666.3	671.3	673.0	677.3
22.5°	640.0	641.7	644.2	644.2	646.8	648.5	651.9	649.3	654.4	655.3	658.6
25°	619.7	621.4	623.1	623.9	626.5	627.3	629.0	627.3	631.5	632.4	636.6
27.5°	593.5	594.3	596.8	596.8	598.5	599.4	601.9	598.5	604.5	604.5	607.0
30°	562.1	561.3	564.7	563.0	564.7	564.7	567.2	565.5	569.7	568.1	570.6
32.5°	520.6	522.3	522.3	520.6	524.0	523.2	523.2	521.5	524.0	524.9	526.6
35°	472.4	474.9	474.9	475.8	476.6	474.1	474.9	469.9	474.1	474.9	475.8
37.5°	419.9	417.4	419.1	416.5	420.8	415.7	415.7	412.3	415.7	415.7	416.5
40°	359.8	358.9	360.6	358.9	358.1	357.3	355.6	353.0	356.4	354.7	357.3
42.5°	303.1	302.2	302.2	300.5	299.7	299.7	298.0	296.3	295.5	295.5	299.7
45°	244.7	246.4	244.7	243.8	245.5	243.8	244.7	241.3	243.0	241.3	243.0
47.5°	195.6	196.4	194.7	193.0	195.6	193.0	193.0	190.5	193.9	193.9	192.2
50°	151.5	150.7	149.0	150.7	149.8	149.8	149.8	147.3	149.0	146.5	148.2
52.5°	111.7	110.9	110.9	110.1	110.9	110.1	110.1	109.2	109.2	108.4	109.2
55°	81.3	80.4	78.7	78.7	78.7	79.6	78.7	77.9	77.9	77.0	77.9
57.5°	55.0	53.3	53.3	53.3	53.3	52.5	52.5	51.6	52.5	51.6	52.5
60°	35.6	35.6	33.9	33.9	33.9	33.9	33.9	33.0	33.9	33.9	33.9
62.5°	22.0	22.0	21.2	20.3	21.2	20.3	20.3	20.3	21.2	20.3	21.2
65°	14.4	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
67.5°	10.2	9.3	9.3	9.3	9.3	9.3	9.3	8.5	9.3	9.3	9.3
70°	6.8	6.8	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
75°	3.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
77.5°	2.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
85°	0.8	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	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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°	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0
2.5°	701.0	701.8	700.1	701.0	699.3	701.0	701.8	703.5
5°	699.3	700.1	698.4	700.1	698.4	700.1	701.0	702.7
7.5°	697.6	699.3	697.6	699.3	697.6	699.3	700.1	701.8
10°	697.6	700.1	698.4	701.0	698.4	700.1	701.8	702.7
12.5°	697.6	700.1	699.3	701.0	700.1	701.8	703.5	705.2
15°	695.9	698.4	696.7	699.3	698.4	699.3	702.7	702.7
17.5°	686.6	689.1	689.1	690.8	690.8	693.3	695.0	696.7
20°	674.7	677.3	676.4	679.0	679.0	681.5	683.2	684.9
22.5°	656.9	660.3	659.5	662.0	661.2	662.9	666.3	665.4
25°	634.1	638.3	637.5	639.2	638.3	638.3	640.0	640.9
27.5°	606.2	608.7	607.8	609.5	607.8	609.5	611.2	612.1
30°	569.7	571.4	570.6	571.4	570.6	572.3	573.1	574.8
32.5°	525.7	528.3	525.7	527.4	526.6	526.6	530.0	528.3
35°	473.2	474.1	474.9	474.9	473.2	474.1	475.8	475.8
37.5°	414.8	419.1	414.0	416.5	415.7	415.7	415.7	418.2
40°	353.9	354.7	353.0	353.0	353.0	352.2	355.6	354.7
42.5°	296.3	297.1	296.3	293.8	294.6	294.6	297.1	293.8
45°	240.4	242.1	241.3	241.3	239.6	239.6	240.4	238.7
47.5°	190.5	192.2	189.6	190.5	188.8	190.5	189.6	191.3
50°	144.8	146.5	145.6	146.5	146.5	144.8	147.3	143.9
52.5°	108.4	109.2	108.4	107.5	106.7	106.7	108.4	107.5
55°	77.0	76.2	76.2	76.2	77.0	77.0	76.2	75.3
57.5°	51.6	51.6	50.8	50.8	51.6	49.9	50.8	49.9
60°	33.0	33.0	33.0	33.0	32.2	33.0	33.0	33.0
62.5°	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
65°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
67.5°	8.5	9.3	9.3	9.3	8.5	8.5	8.5	8.5
70°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
75°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	0.8	0.8	0.8	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)