

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: P252238

Luminaire Tested: **LE\_6B10D010 EC6B10209027 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252238  
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 EC6B10209027 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1008.8 lumens  
Efficiency: N/A  
Efficacy: 100.9 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

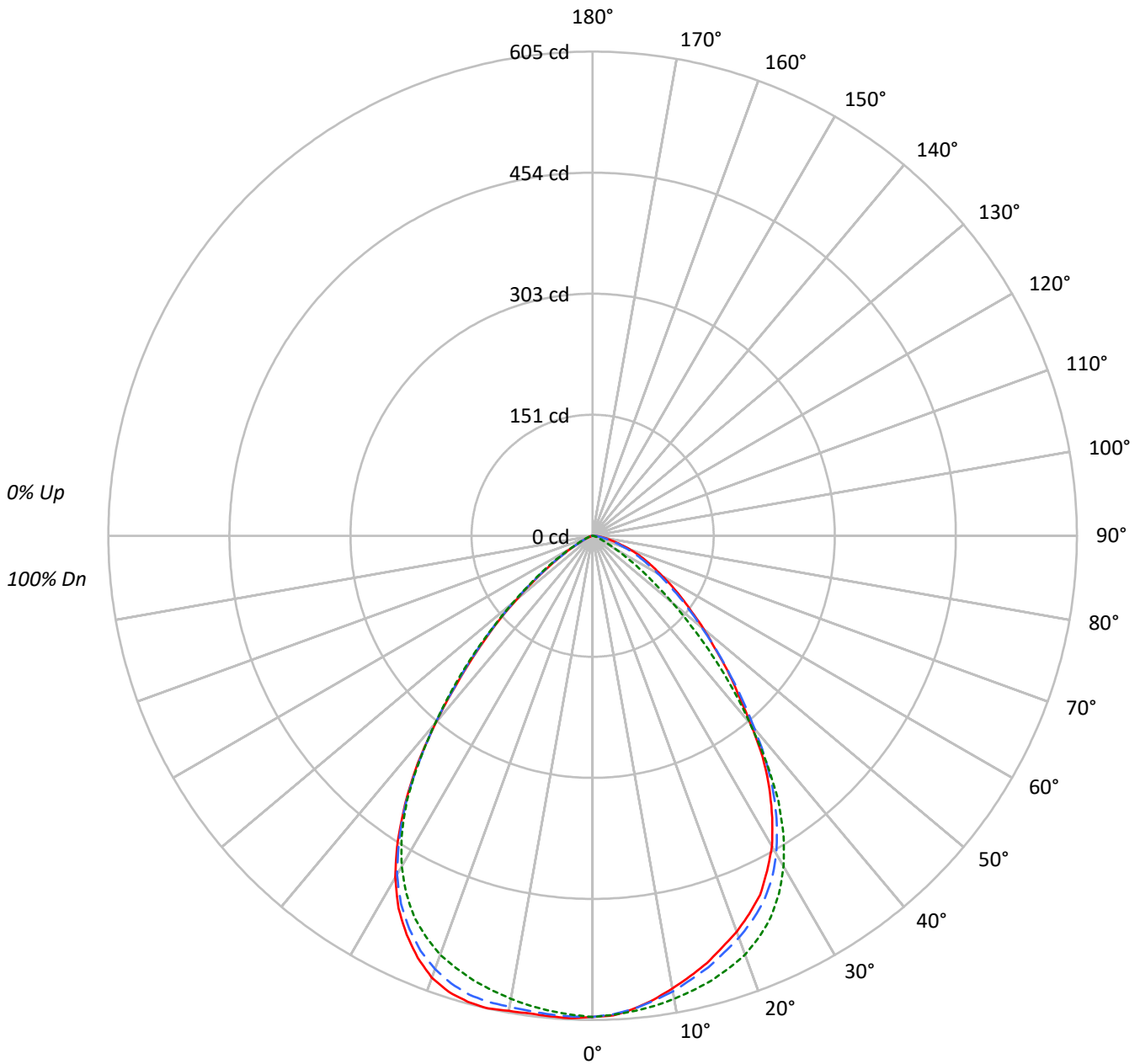
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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°	39223	39223	39223
5°	38849	39045	39477
10°	38052	38920	39934
15°	37324	38843	40714
20°	36554	38671	40789
25°	35647	37900	39577
30°	33749	35942	37147
35°	30655	32216	32503
40°	26154	26044	25907
45°	21968	19505	18896
50°	18361	13195	12535
55°	15446	8087	7348
60°	13074	4254	3706
65°	11331	2238	1791
70°	9423	1373	973
75°	6957	907	529
80°	5448	564	301
85°	4342	599	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.7	5.6
10°-20°	162.3	16.1
20°-30°	239.6	23.8
30°-40°	246.9	24.5
40°-50°	170.5	16.9
50°-60°	84.1	8.3
60°-70°	34.1	3.4
70°-80°	12.1	1.2
80°-90°	2.5	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°	458.5	45.5
0°-40°	705.4	69.9
0°-60°	960.0	95.2
0°-90°	1008.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1008.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	601	601	601	601	601	
5°	593	593	596	600	603	56
15°	553	558	575	594	603	156
25°	495	505	526	542	550	226
35°	385	394	404	407	408	238
45°	238	240	211	208	205	184
55°	136	131	71	67	65	123
65°	73	66	14	12	12	73
75°	28	23	4	2	2	31
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°	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2
2.5°	599.9	597.6	599.1	596.2	599.9	596.2	596.9	597.6	596.9	597.6	598.4
5°	593.2	591.1	593.2	589.6	593.2	591.1	591.1	591.9	591.9	592.6	593.2
7.5°	584.6	582.4	584.6	581.0	585.2	583.1	583.1	584.6	583.9	584.6	586.0
10°	574.4	571.5	573.6	571.5	575.9	573.0	574.4	574.4	574.4	576.6	578.0
12.5°	563.5	560.6	563.5	559.9	564.2	562.1	562.8	565.0	565.8	567.1	567.9
15°	552.6	549.0	550.5	548.2	552.6	550.5	551.1	554.1	554.1	556.2	558.4
17.5°	538.9	535.9	538.9	535.9	539.5	538.1	539.5	541.8	541.8	543.9	546.1
20°	526.5	523.6	525.8	523.6	527.9	525.8	526.5	529.4	530.1	532.2	534.5
22.5°	511.2	509.0	510.5	508.4	512.6	511.2	512.0	514.9	515.6	517.0	520.6
25°	495.2	490.9	493.1	491.6	496.0	493.8	495.2	498.1	499.6	501.8	504.8
27.5°	472.0	469.9	471.2	471.2	474.9	472.8	473.5	476.4	478.5	480.8	484.4
30°	448.0	444.4	445.9	446.6	449.5	448.0	449.5	452.4	453.1	456.0	459.0
32.5°	417.5	416.1	419.0	417.5	419.0	419.0	419.8	421.9	423.4	424.9	428.5
35°	384.9	382.0	384.9	383.4	387.0	384.9	387.0	389.2	389.2	392.1	394.4
37.5°	349.2	345.6	347.1	347.1	348.6	347.9	347.9	351.5	352.2	354.4	356.5
40°	307.1	305.8	308.6	307.9	308.6	308.6	309.4	311.5	313.0	313.8	314.4
42.5°	269.4	270.1	270.9	270.9	270.9	270.9	270.9	273.8	273.0	275.2	276.0
45°	238.1	235.2	236.8	236.0	238.1	236.0	238.1	240.4	238.9	241.1	239.6
47.5°	206.2	206.2	206.2	205.5	207.0	206.2	207.6	208.4	208.4	208.4	207.6
50°	180.9	178.6	179.4	179.4	180.1	179.4	180.9	181.5	181.5	180.1	177.2
52.5°	156.1	155.4	155.4	156.9	156.9	156.1	156.1	156.1	156.1	154.0	152.5
55°	135.8	134.4	135.1	135.1	135.1	135.1	135.8	135.1	135.1	132.9	130.8
57.5°	117.6	116.2	116.2	116.2	116.9	116.2	116.2	116.2	115.5	113.2	110.4
60°	100.2	99.5	100.2	100.2	101.0	100.2	100.2	100.2	98.8	96.6	93.6
62.5°	85.8	85.8	85.8	86.4	86.4	85.8	85.8	85.0	84.2	81.4	78.4
65°	73.4	72.6	73.4	73.4	74.1	74.1	73.4	72.6	71.9	69.0	66.1
67.5°	61.0	60.2	61.0	61.0	61.8	61.0	61.0	61.0	58.9	57.4	54.5
70°	49.4	48.6	48.6	48.6	49.4	47.9	48.6	48.6	47.2	45.0	42.1
72.5°	37.8	37.8	37.8	37.8	37.8	37.8	37.0	37.0	35.6	33.4	32.0
75°	27.6	27.6	28.4	28.4	27.6	27.6	27.6	26.9	26.1	24.8	23.2
77.5°	20.4	20.4	20.4	20.4	19.6	19.6	19.6	18.9	18.1	17.4	16.0
80°	14.5	14.5	14.5	13.8	14.5	13.8	13.8	13.8	12.4	11.6	10.9
82.5°	10.1	9.5	9.5	9.5	9.5	9.5	9.5	8.8	8.8	8.0	7.2
85°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.1	4.4	4.4
87.5°	2.9	3.6	3.6	3.6	3.6	3.6	3.6	2.9	2.9	2.9	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°	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2
2.5°	598.4	598.4	599.9	597.6	601.2	599.1	598.4	602.0	599.9	599.1	600.5
5°	593.2	594.0	594.8	593.2	596.9	594.8	594.8	598.4	596.9	596.2	598.4
7.5°	586.8	587.5	588.9	588.2	591.1	589.6	590.4	594.0	592.6	592.6	594.8
10°	578.8	580.2	581.6	581.6	585.2	583.9	583.9	588.2	586.8	587.5	590.4
12.5°	569.4	571.5	573.6	574.4	578.0	575.9	576.6	581.6	581.0	581.6	584.6
15°	559.1	562.1	564.2	564.2	568.6	566.4	568.6	573.6	572.2	575.1	578.8
17.5°	547.5	550.5	553.4	554.1	558.4	557.0	559.9	565.0	565.0	566.4	570.8
20°	536.6	540.2	541.8	543.9	548.2	547.5	549.0	554.8	554.8	557.0	561.4
22.5°	522.1	525.8	528.6	530.9	534.5	534.5	536.6	541.8	541.8	543.1	547.5
25°	506.1	510.5	512.6	514.9	518.5	517.8	520.0	524.2	525.0	526.5	530.9
27.5°	485.9	489.5	492.4	493.8	498.9	496.0	498.1	503.2	502.5	504.0	507.6
30°	460.4	464.0	466.9	466.9	471.2	471.2	473.5	475.6	475.6	477.1	480.0
32.5°	430.6	435.0	435.0	437.1	440.1	437.1	440.1	443.0	441.5	443.8	445.9
35°	396.5	398.6	399.4	399.4	401.6	400.9	400.1	402.2	400.9	404.5	406.6
37.5°	355.1	358.0	356.5	358.0	357.2	355.1	355.1	358.8	355.9	356.5	358.8
40°	315.1	315.1	314.4	310.8	311.5	309.4	308.6	309.4	306.5	305.8	308.6
42.5°	273.8	273.0	270.9	265.8	266.5	262.9	260.0	260.0	258.5	257.8	258.5
45°	236.8	234.5	230.9	225.1	223.6	220.8	215.0	213.5	211.4	211.4	212.0
47.5°	202.6	199.8	193.9	187.4	183.8	180.1	174.2	172.1	168.5	167.0	168.5
50°	174.2	169.2	162.0	152.5	148.9	144.5	138.8	135.1	131.5	130.0	129.2
52.5°	148.1	140.9	133.6	122.0	119.1	114.8	106.8	103.1	99.5	96.6	96.6
55°	125.6	119.1	108.9	98.0	93.6	89.4	81.4	76.2	72.6	71.1	69.8
57.5°	105.2	98.0	88.6	77.0	72.6	68.2	60.2	55.2	51.5	49.4	47.9
60°	88.6	80.6	71.1	61.0	55.9	51.5	43.6	38.5	34.9	32.6	31.2
62.5°	72.6	66.1	56.6	47.2	42.9	38.5	32.0	26.9	23.2	21.8	19.6
65°	61.0	54.5	45.8	37.8	34.1	29.8	24.0	19.6	16.8	14.5	13.1
67.5°	49.4	44.2	37.0	29.8	26.1	23.2	18.1	14.5	11.6	10.1	9.5
70°	39.2	34.1	28.4	22.5	20.4	17.4	13.8	10.1	8.8	7.2	6.5
72.5°	29.0	25.4	21.0	16.8	14.5	13.1	9.5	8.0	5.8	5.1	4.4
75°	21.0	18.1	15.2	11.6	10.1	9.5	7.2	5.1	4.4	3.6	2.9
77.5°	14.5	13.1	10.1	8.0	7.2	6.5	5.1	3.6	2.9	2.1	2.1
80°	9.5	8.0	6.5	5.1	5.1	4.4	2.9	2.1	2.1	1.5	1.5
82.5°	5.8	5.1	4.4	3.6	2.9	2.9	2.1	1.5	1.5	0.8	0.8
85°	3.6	2.9	2.1	2.1	1.5	1.5	1.5	0.8	0.8	0.8	0.8
87.5°	1.5	1.5	1.5	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°	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2
2.5°	600.5	600.5	602.0	599.9	601.2	601.2	602.8	599.9	601.2	602.0	603.5
5°	597.6	598.4	599.9	599.1	599.9	599.9	601.2	597.6	600.5	600.5	602.8
7.5°	594.8	594.8	596.2	595.5	596.9	597.6	599.1	596.2	599.1	599.1	601.2
10°	591.1	591.1	593.2	592.6	594.8	595.5	597.6	594.8	597.6	598.4	600.5
12.5°	586.0	586.8	588.9	588.9	591.1	592.6	594.8	593.2	596.9	597.6	600.5
15°	580.2	581.6	584.6	583.9	586.0	588.2	591.1	588.9	594.0	595.5	598.4
17.5°	573.0	574.4	576.6	576.6	578.8	580.2	583.9	582.4	586.8	587.5	591.1
20°	562.1	564.2	567.1	566.4	568.6	570.0	573.0	571.5	575.9	577.4	581.0
22.5°	549.0	550.5	552.6	552.6	554.8	556.2	559.1	557.0	561.4	562.1	565.0
25°	531.6	533.0	534.5	535.2	537.4	538.1	539.5	538.1	541.8	542.5	546.1
27.5°	509.0	509.8	512.0	512.0	513.4	514.1	516.4	513.4	518.5	518.5	520.6
30°	482.1	481.5	484.4	482.9	484.4	484.4	486.5	485.1	488.8	487.2	489.5
32.5°	446.6	448.0	448.0	446.6	449.5	448.8	448.8	447.4	449.5	450.2	451.6
35°	405.2	407.4	407.4	408.1	408.9	406.6	407.4	403.0	406.6	407.4	408.1
37.5°	360.1	358.0	359.5	357.2	360.9	356.5	356.5	353.6	356.5	356.5	357.2
40°	308.6	307.9	309.4	307.9	307.1	306.5	305.0	302.9	305.8	304.2	306.5
42.5°	260.0	259.2	259.2	257.8	257.1	257.1	255.6	254.1	253.4	253.4	257.1
45°	209.9	211.4	209.9	209.1	210.6	209.1	209.9	207.0	208.4	207.0	208.4
47.5°	167.8	168.5	167.0	165.6	167.8	165.6	165.6	163.4	166.2	166.2	164.9
50°	130.0	129.2	127.8	129.2	128.5	128.5	128.5	126.4	127.8	125.6	127.1
52.5°	95.9	95.1	95.1	94.4	95.1	94.4	94.4	93.6	93.6	93.0	93.6
55°	69.8	69.0	67.5	67.5	67.5	68.2	67.5	66.8	66.8	66.1	66.8
57.5°	47.2	45.8	45.8	45.8	45.8	45.0	45.0	44.2	45.0	44.2	45.0
60°	30.5	30.5	29.0	29.0	29.0	29.0	29.0	28.4	29.0	29.0	29.0
62.5°	18.9	18.9	18.1	17.4	18.1	17.4	17.4	17.4	18.1	17.4	18.1
65°	12.4	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
67.5°	8.8	8.0	8.0	8.0	8.0	8.0	8.0	7.2	8.0	8.0	8.0
70°	5.8	5.8	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
72.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
75°	2.9	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	2.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
80°	1.5	1.5	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°	601.2	601.2	601.2	601.2	601.2	601.2	601.2	601.2
2.5°	601.2	602.0	600.5	601.2	599.9	601.2	602.0	603.5
5°	599.9	600.5	599.1	600.5	599.1	600.5	601.2	602.8
7.5°	598.4	599.9	598.4	599.9	598.4	599.9	600.5	602.0
10°	598.4	600.5	599.1	601.2	599.1	600.5	602.0	602.8
12.5°	598.4	600.5	599.9	601.2	600.5	602.0	603.5	604.9
15°	596.9	599.1	597.6	599.9	599.1	599.9	602.8	602.8
17.5°	588.9	591.1	591.1	592.6	592.6	594.8	596.2	597.6
20°	578.8	581.0	580.2	582.4	582.4	584.6	586.0	587.5
22.5°	563.5	566.4	565.8	567.9	567.1	568.6	571.5	570.8
25°	543.9	547.5	546.9	548.2	547.5	547.5	549.0	549.8
27.5°	520.0	522.1	521.4	522.9	521.4	522.9	524.2	525.0
30°	488.8	490.1	489.5	490.1	489.5	490.9	491.6	493.1
32.5°	451.0	453.1	451.0	452.4	451.6	451.6	454.6	453.1
35°	405.9	406.6	407.4	407.4	405.9	406.6	408.1	408.1
37.5°	355.9	359.5	355.1	357.2	356.5	356.5	356.5	358.8
40°	303.5	304.2	302.9	302.9	302.9	302.1	305.0	304.2
42.5°	254.1	254.9	254.1	252.0	252.8	252.8	254.9	252.0
45°	206.2	207.6	207.0	207.0	205.5	205.5	206.2	204.8
47.5°	163.4	164.9	162.6	163.4	162.0	163.4	162.6	164.1
50°	124.1	125.6	124.9	125.6	125.6	124.1	126.4	123.5
52.5°	93.0	93.6	93.0	92.2	91.5	91.5	93.0	92.2
55°	66.1	65.4	65.4	65.4	66.1	66.1	65.4	64.6
57.5°	44.2	44.2	43.6	43.6	44.2	42.9	43.6	42.9
60°	28.4	28.4	28.4	28.4	27.6	28.4	28.4	28.4
62.5°	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4
65°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
67.5°	7.2	8.0	8.0	8.0	7.2	7.2	7.2	7.2
70°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
72.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)