

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: P252241

Luminaire Tested: **LE_6B10D010 EC6B10209040 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252241
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 EC6B10209040 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: 1065.0 lumens
Efficiency: N/A
Efficacy: 106.5 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

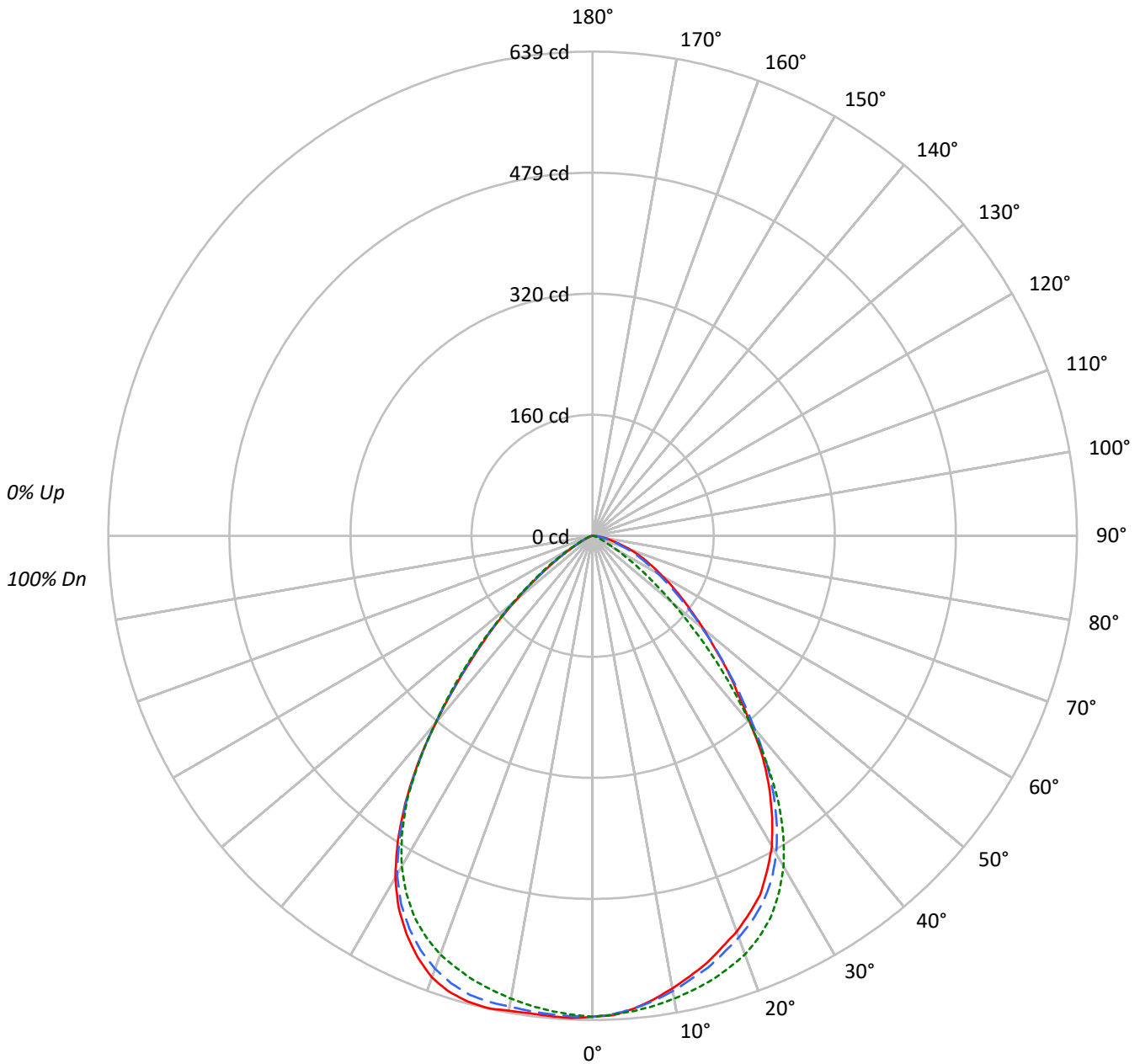
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	41415	41415	41415
5°	41023	41226	41678
10°	40179	41086	42160
15°	39411	41012	42984
20°	38595	40823	43059
25°	37641	40016	41780
30°	35633	37953	39219
35°	32367	34008	34319
40°	27611	27491	27355
45°	23204	20584	19948
50°	19376	13925	13235
55°	16311	8542	7757
60°	13805	4502	3901
65°	11948	2377	1883
70°	9938	1450	1030
75°	7335	983	555
80°	5786	564	301
85°	4566	599	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	5.6
10°-20°	171.3	16.1
20°-30°	253.0	23.8
30°-40°	260.7	24.5
40°-50°	180.1	16.9
50°-60°	88.7	8.3
60°-70°	35.9	3.4
70°-80°	12.8	1.2
80°-90°	2.7	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°	484.1	45.5
0°-40°	744.8	69.9
0°-60°	1013.6	95.2
0°-90°	1065.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1065.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	635	635	635	635	635	
5°	626	626	630	634	636	59
15°	584	590	607	627	636	164
25°	523	533	556	572	580	239
35°	406	416	427	429	431	252
45°	252	253	223	220	216	194
55°	143	138	75	70	68	130
65°	77	70	15	12	12	77
75°	29	24	4	2	2	33
85°	6	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°	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8
2.5°	633.2	631.0	632.5	629.5	633.2	629.5	630.2	631.0	630.2	631.0	631.8
5°	626.4	624.1	626.4	622.5	626.4	624.1	624.1	624.9	624.9	625.6	626.4
7.5°	617.1	614.9	617.1	613.4	618.0	615.6	615.6	617.1	616.4	617.1	618.8
10°	606.5	603.4	605.6	603.4	608.0	604.9	606.5	606.5	606.5	608.8	610.2
12.5°	595.0	591.9	595.0	591.1	595.8	593.4	594.1	596.5	597.2	598.8	599.5
15°	583.5	579.6	581.1	578.9	583.5	581.1	581.9	585.0	585.0	587.2	589.6
17.5°	568.9	565.8	568.9	565.8	569.6	568.1	569.6	572.0	572.0	574.2	576.5
20°	555.9	552.8	555.1	552.8	557.4	555.1	555.9	558.9	559.6	562.0	564.2
22.5°	539.8	537.5	539.0	536.6	541.2	539.8	540.5	543.6	544.4	545.9	549.8
25°	522.9	518.2	520.6	519.0	523.6	521.4	522.9	526.0	527.5	529.8	532.9
27.5°	498.4	496.0	497.6	497.6	501.4	499.1	499.9	503.0	505.2	507.5	511.4
30°	473.0	469.2	470.8	471.5	474.6	473.0	474.6	477.6	478.4	481.5	484.5
32.5°	440.9	439.2	442.4	440.9	442.4	442.4	443.1	445.4	447.0	448.5	452.4
35°	406.4	403.2	406.4	404.8	408.6	406.4	408.6	410.9	410.9	414.0	416.2
37.5°	368.8	364.9	366.5	366.5	368.0	367.2	367.2	371.1	371.9	374.1	376.4
40°	324.2	322.8	325.9	325.1	325.9	325.9	326.6	328.9	330.4	331.2	332.0
42.5°	284.4	285.2	286.0	286.0	286.0	286.0	286.0	289.0	288.2	290.6	291.4
45°	251.5	248.4	249.9	249.1	251.5	249.1	251.5	253.8	252.2	254.5	253.0
47.5°	217.8	217.8	217.8	217.0	218.5	217.8	219.2	220.0	220.0	220.0	219.2
50°	190.9	188.6	189.4	189.4	190.1	189.4	190.9	191.6	191.6	190.1	187.1
52.5°	164.9	164.1	164.1	165.6	165.6	164.9	164.9	164.9	164.9	162.5	161.0
55°	143.4	141.9	142.6	142.6	142.6	142.6	143.4	142.6	142.6	140.2	138.0
57.5°	124.2	122.6	122.6	122.6	123.4	122.6	122.6	122.6	121.9	119.6	116.5
60°	105.8	105.0	105.8	105.8	106.6	105.8	105.8	105.8	104.2	102.0	98.9
62.5°	90.5	90.5	90.5	91.2	91.2	90.5	90.5	89.8	88.9	85.9	82.8
65°	77.4	76.6	77.4	77.4	78.2	78.2	77.4	76.6	75.9	72.9	69.8
67.5°	64.4	63.6	64.4	64.4	65.1	64.4	64.4	64.4	62.1	60.6	57.5
70°	52.1	51.4	51.4	51.4	52.1	50.6	51.4	51.4	49.9	47.5	44.5
72.5°	39.9	39.9	39.9	39.9	39.9	39.9	39.1	39.1	37.6	35.2	33.8
75°	29.1	29.1	29.9	29.9	29.1	29.1	29.1	28.4	27.6	26.1	24.5
77.5°	21.5	21.5	21.5	21.5	20.8	20.8	20.8	19.9	19.1	18.4	16.9
80°	15.4	15.4	15.4	14.6	15.4	14.6	14.6	14.6	13.0	12.2	11.5
82.5°	10.8	10.0	10.0	10.0	10.0	10.0	10.0	9.2	9.2	8.4	7.6
85°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	5.4	4.6	4.6
87.5°	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.1	3.1	3.1	2.2
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°	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8
2.5°	631.8	631.8	633.2	631.0	634.8	632.5	631.8	635.6	633.2	632.5	634.0
5°	626.4	627.1	627.9	626.4	630.2	627.9	627.9	631.8	630.2	629.5	631.8
7.5°	619.5	620.2	621.8	621.0	624.1	622.5	623.2	627.1	625.6	625.6	627.9
10°	611.0	612.6	614.1	614.1	618.0	616.4	616.4	621.0	619.5	620.2	623.2
12.5°	601.1	603.4	605.6	606.5	610.2	608.0	608.8	614.1	613.4	614.1	617.1
15°	590.4	593.4	595.8	595.8	600.2	598.0	600.2	605.6	604.1	607.2	611.0
17.5°	578.1	581.1	584.2	585.0	589.6	588.0	591.1	596.5	596.5	598.0	602.6
20°	566.6	570.4	572.0	574.2	578.9	578.1	579.6	585.8	585.8	588.0	592.6
22.5°	551.2	555.1	558.1	560.5	564.2	564.2	566.6	572.0	572.0	573.5	578.1
25°	534.4	539.0	541.2	543.6	547.4	546.6	549.0	553.5	554.2	555.9	560.5
27.5°	512.9	516.8	519.8	521.4	526.8	523.6	526.0	531.2	530.5	532.1	535.9
30°	486.1	489.9	493.0	493.0	497.6	497.6	499.9	502.1	502.1	503.8	506.8
32.5°	454.6	459.2	459.2	461.5	464.6	461.5	464.6	467.6	466.1	468.4	470.8
35°	418.6	420.9	421.6	421.6	424.0	423.2	422.4	424.8	423.2	427.0	429.4
37.5°	374.9	378.0	376.4	378.0	377.2	374.9	374.9	378.8	375.6	376.4	378.8
40°	332.8	332.8	332.0	328.1	328.9	326.6	325.9	326.6	323.5	322.8	325.9
42.5°	289.0	288.2	286.0	280.6	281.4	277.5	274.5	274.5	272.9	272.1	272.9
45°	249.9	247.6	243.8	237.6	236.1	233.1	226.9	225.4	223.1	223.1	223.9
47.5°	213.9	210.9	204.8	197.8	194.0	190.1	184.0	181.8	177.9	176.4	177.9
50°	184.0	178.6	171.0	161.0	157.1	152.6	146.4	142.6	138.8	137.2	136.5
52.5°	156.4	148.8	141.1	128.8	125.8	121.1	112.8	108.9	105.0	102.0	102.0
55°	132.6	125.8	115.0	103.5	98.9	94.2	85.9	80.5	76.6	75.1	73.6
57.5°	111.1	103.5	93.5	81.2	76.6	72.1	63.6	58.2	54.4	52.1	50.6
60°	93.5	85.1	75.1	64.4	59.0	54.4	46.0	40.6	36.8	34.5	33.0
62.5°	76.6	69.8	59.8	49.9	45.2	40.6	33.8	28.4	24.5	23.0	20.8
65°	64.4	57.5	48.2	39.9	36.0	31.4	25.2	20.8	17.6	15.4	13.8
67.5°	52.1	46.8	39.1	31.4	27.6	24.5	19.1	15.4	12.2	10.8	10.0
70°	41.4	36.0	29.9	23.8	21.5	18.4	14.6	10.8	9.2	7.6	6.9
72.5°	30.6	26.9	22.2	17.6	15.4	13.8	10.0	8.4	6.1	5.4	4.6
75°	22.2	19.1	16.1	12.2	10.8	10.0	7.6	5.4	4.6	3.9	3.1
77.5°	15.4	13.8	10.8	8.4	7.6	6.9	5.4	3.9	3.1	2.2	2.2
80°	10.0	8.4	6.9	5.4	5.4	4.6	3.1	2.2	2.2	1.5	1.5
82.5°	6.1	5.4	4.6	3.9	3.1	3.1	2.2	1.5	1.5	0.8	0.8
85°	3.9	3.1	2.2	2.2	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°	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8
2.5°	634.0	634.0	635.6	633.2	634.8	634.8	636.4	633.2	634.8	635.6	637.1
5°	631.0	631.8	633.2	632.5	633.2	633.2	634.8	631.0	634.0	634.0	636.4
7.5°	627.9	627.9	629.5	628.6	630.2	631.0	632.5	629.5	632.5	632.5	634.8
10°	624.1	624.1	626.4	625.6	627.9	628.6	631.0	627.9	631.0	631.8	634.0
12.5°	618.8	619.5	621.8	621.8	624.1	625.6	627.9	626.4	630.2	631.0	634.0
15°	612.6	614.1	617.1	616.4	618.8	621.0	624.1	621.8	627.1	628.6	631.8
17.5°	604.9	606.5	608.8	608.8	611.0	612.6	616.4	614.9	619.5	620.2	624.1
20°	593.4	595.8	598.8	598.0	600.2	601.9	604.9	603.4	608.0	609.5	613.4
22.5°	579.6	581.1	583.5	583.5	585.8	587.2	590.4	588.0	592.6	593.4	596.5
25°	561.2	562.8	564.2	565.0	567.4	568.1	569.6	568.1	572.0	572.8	576.5
27.5°	537.5	538.2	540.5	540.5	542.0	542.8	545.1	542.0	547.4	547.4	549.8
30°	509.1	508.2	511.4	509.9	511.4	511.4	513.6	512.1	516.0	514.5	516.8
32.5°	471.5	473.0	473.0	471.5	474.6	473.8	473.8	472.2	474.6	475.4	476.9
35°	427.8	430.1	430.1	430.9	431.6	429.4	430.1	425.5	429.4	430.1	430.9
37.5°	380.2	378.0	379.5	377.2	381.0	376.4	376.4	373.4	376.4	376.4	377.2
40°	325.9	325.1	326.6	325.1	324.2	323.5	322.0	319.8	322.8	321.2	323.5
42.5°	274.5	273.8	273.8	272.1	271.4	271.4	269.9	268.4	267.6	267.6	271.4
45°	221.6	223.1	221.6	220.8	222.4	220.8	221.6	218.5	220.0	218.5	220.0
47.5°	177.1	177.9	176.4	174.8	177.1	174.8	174.8	172.5	175.6	175.6	174.0
50°	137.2	136.5	134.9	136.5	135.8	135.8	135.8	133.4	134.9	132.6	134.1
52.5°	101.2	100.4	100.4	99.6	100.4	99.6	99.6	98.9	98.9	98.1	98.9
55°	73.6	72.9	71.2	71.2	71.2	72.1	71.2	70.5	70.5	69.8	70.5
57.5°	49.9	48.2	48.2	48.2	48.2	47.5	47.5	46.8	47.5	46.8	47.5
60°	32.2	32.2	30.6	30.6	30.6	30.6	30.6	29.9	30.6	30.6	30.6
62.5°	19.9	19.9	19.1	18.4	19.1	18.4	18.4	18.4	19.1	18.4	19.1
65°	13.0	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
67.5°	9.2	8.4	8.4	8.4	8.4	8.4	8.4	7.6	8.4	8.4	8.4
70°	6.1	6.1	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
75°	3.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
77.5°	2.2	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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CATALOG NUMBER: LE_6B10D010 EC6B10209040 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	634.8	634.8	634.8	634.8	634.8	634.8	634.8	634.8
2.5°	634.8	635.6	634.0	634.8	633.2	634.8	635.6	637.1
5°	633.2	634.0	632.5	634.0	632.5	634.0	634.8	636.4
7.5°	631.8	633.2	631.8	633.2	631.8	633.2	634.0	635.6
10°	631.8	634.0	632.5	634.8	632.5	634.0	635.6	636.4
12.5°	631.8	634.0	633.2	634.8	634.0	635.6	637.1	638.6
15°	630.2	632.5	631.0	633.2	632.5	633.2	636.4	636.4
17.5°	621.8	624.1	624.1	625.6	625.6	627.9	629.5	631.0
20°	611.0	613.4	612.6	614.9	614.9	617.1	618.8	620.2
22.5°	595.0	598.0	597.2	599.5	598.8	600.2	603.4	602.6
25°	574.2	578.1	577.2	578.9	578.1	578.1	579.6	580.4
27.5°	549.0	551.2	550.5	552.0	550.5	552.0	553.5	554.2
30°	516.0	517.5	516.8	517.5	516.8	518.2	519.0	520.6
32.5°	476.1	478.4	476.1	477.6	476.9	476.9	480.0	478.4
35°	428.6	429.4	430.1	430.1	428.6	429.4	430.9	430.9
37.5°	375.6	379.5	374.9	377.2	376.4	376.4	376.4	378.8
40°	320.5	321.2	319.8	319.8	319.8	318.9	322.0	321.2
42.5°	268.4	269.1	268.4	266.0	266.8	266.8	269.1	266.0
45°	217.8	219.2	218.5	218.5	217.0	217.0	217.8	216.2
47.5°	172.5	174.0	171.8	172.5	171.0	172.5	171.8	173.2
50°	131.1	132.6	131.9	132.6	132.6	131.1	133.4	130.4
52.5°	98.1	98.9	98.1	97.4	96.6	96.6	98.1	97.4
55°	69.8	69.0	69.0	69.0	69.8	69.8	69.0	68.2
57.5°	46.8	46.8	46.0	46.0	46.8	45.2	46.0	45.2
60°	29.9	29.9	29.9	29.9	29.1	29.9	29.9	29.9
62.5°	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
65°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
67.5°	7.6	8.4	8.4	8.4	7.6	7.6	7.6	7.6
70°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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)