

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: P252254

Luminaire Tested: **LE_6B15D010 EC6B10209040 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: PORTFOLIO
Catalog Number: LE_6B15D010 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: 1470.0 lumens
Efficiency: N/A
Efficacy: 102.1 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

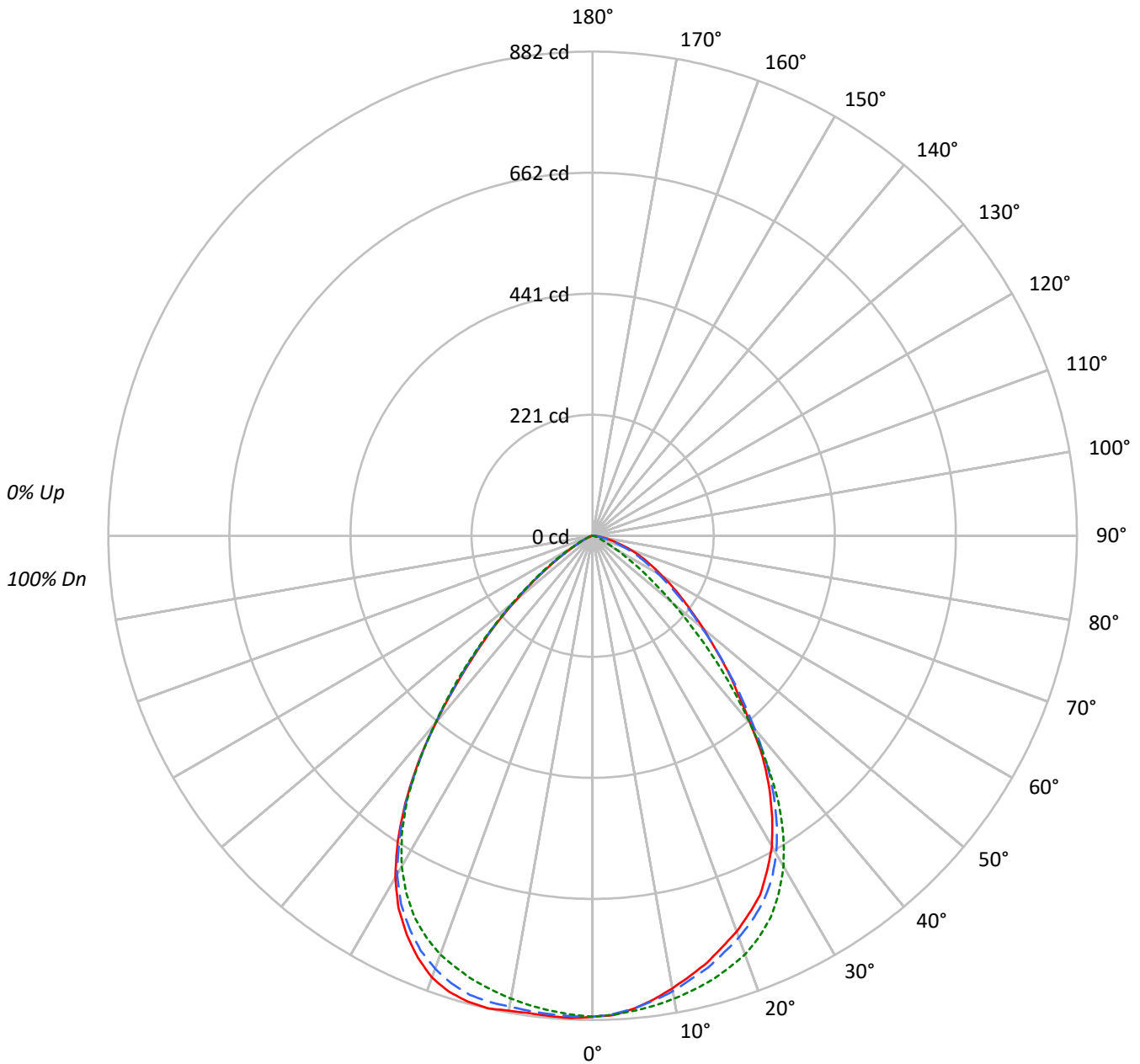
Input Watts (W): 14.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	57164	57164	57164
5°	56623	56898	57526
10°	55449	56714	58191
15°	54385	56607	59329
20°	53265	56347	59437
25°	51959	55227	57667
30°	49185	52372	54127
35°	44672	46942	47372
40°	38120	37941	37762
45°	32025	28417	27532
50°	26744	19223	18259
55°	22510	11807	10703
60°	19050	6211	5376
65°	16502	3257	2609
70°	13734	2022	1412
75°	10133	1311	781
80°	7927	789	376
85°	6363	749	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.6	5.6
10°-20°	236.4	16.1
20°-30°	349.1	23.8
30°-40°	359.8	24.5
40°-50°	248.5	16.9
50°-60°	122.5	8.3
60°-70°	49.6	3.4
70°-80°	17.7	1.2
80°-90°	3.6	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°	668.2	45.5
0°-40°	1028.0	69.9
0°-60°	1399.0	95.2
0°-90°	1470.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1470.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	876	876	876	876	876	
5°	865	865	869	875	878	82
15°	805	814	838	866	878	227
25°	722	736	767	789	801	330
35°	561	575	589	593	595	348
45°	347	349	308	304	298	268
55°	198	190	104	97	94	179
65°	107	96	21	17	17	106
75°	40	34	5	3	3	45
85°	8	6	1	0	0	10
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°	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2
2.5°	874.1	870.9	873.0	868.8	874.1	868.8	869.9	870.9	869.9	870.9	872.0
5°	864.6	861.4	864.6	859.2	864.6	861.4	861.4	862.5	862.5	863.5	864.6
7.5°	851.9	848.8	851.9	846.6	852.9	849.8	849.8	851.9	850.9	851.9	854.0
10°	837.0	832.9	836.0	832.9	839.1	835.0	837.0	837.0	837.0	840.2	842.4
12.5°	821.1	817.0	821.1	815.9	822.2	819.1	820.1	823.2	824.4	826.5	827.5
15°	805.2	800.0	802.1	799.0	805.2	802.1	803.2	807.4	807.4	810.6	813.8
17.5°	785.2	781.0	785.2	781.0	786.2	784.1	786.2	789.4	789.4	792.6	795.8
20°	767.2	763.0	766.1	763.0	769.4	766.1	767.2	771.5	772.5	775.6	778.9
22.5°	745.0	741.9	743.9	740.8	747.1	745.0	746.0	750.2	751.4	753.5	758.8
25°	721.8	715.4	718.5	716.4	722.8	719.6	721.8	726.0	728.0	731.2	735.5
27.5°	687.9	684.6	686.8	686.8	692.1	688.9	690.0	694.2	697.4	700.5	705.9
30°	652.9	647.6	649.8	650.8	655.0	652.9	655.0	659.2	660.4	664.6	668.8
32.5°	608.5	606.4	610.6	608.5	610.6	610.6	611.6	614.9	617.0	619.0	624.4
35°	560.9	556.6	560.9	558.8	564.0	560.9	564.0	567.2	567.2	571.5	574.6
37.5°	509.0	503.8	505.9	505.9	508.0	506.9	506.9	512.1	513.2	516.4	519.6
40°	447.6	445.5	449.8	448.6	449.8	449.8	450.8	454.0	456.1	457.1	458.2
42.5°	392.6	393.6	394.8	394.8	394.8	394.8	394.8	399.0	397.9	401.1	402.1
45°	347.1	342.9	345.0	343.9	347.1	343.9	347.1	350.2	348.1	351.4	349.2
47.5°	300.5	300.5	300.5	299.5	301.6	300.5	302.6	303.8	303.8	303.8	302.6
50°	263.5	260.4	261.4	261.4	262.5	261.4	263.5	264.5	264.5	262.5	258.2
52.5°	227.5	226.5	226.5	228.6	228.6	227.5	227.5	227.5	227.5	224.4	222.2
55°	197.9	195.8	196.9	196.9	196.9	196.9	197.9	196.9	196.9	193.6	190.5
57.5°	171.4	169.4	169.4	169.4	170.4	169.4	169.4	169.4	168.2	165.1	160.9
60°	146.0	145.0	146.0	146.0	147.1	146.0	146.0	146.0	143.9	140.8	136.5
62.5°	124.9	124.9	124.9	125.9	125.9	124.9	124.9	123.8	122.8	118.5	114.2
65°	106.9	105.9	106.9	106.9	108.0	108.0	106.9	105.9	104.8	100.5	96.2
67.5°	88.9	87.9	88.9	88.9	90.0	88.9	88.9	88.9	85.8	83.6	79.4
70°	72.0	70.9	70.9	70.9	72.0	69.9	70.9	70.9	68.8	65.6	61.4
72.5°	55.0	55.0	55.0	55.0	55.0	55.0	54.0	54.0	51.9	48.6	46.5
75°	40.2	40.2	41.2	41.2	40.2	40.2	40.2	39.1	38.1	36.0	33.9
77.5°	29.6	29.6	29.6	29.6	28.6	28.6	28.6	27.5	26.5	25.4	23.2
80°	21.1	21.1	21.1	20.1	21.1	20.1	20.1	20.1	18.0	16.9	15.9
82.5°	14.9	13.8	13.8	13.8	13.8	13.8	13.8	12.8	12.8	11.6	10.6
85°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	7.4	6.4	6.4
87.5°	4.2	5.2	5.2	5.2	5.2	5.2	5.2	4.2	4.2	4.2	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°	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2
2.5°	872.0	872.0	874.1	870.9	876.2	873.0	872.0	877.2	874.1	873.0	875.1
5°	864.6	865.6	866.6	864.6	869.9	866.6	866.6	872.0	869.9	868.8	872.0
7.5°	855.0	856.1	858.2	857.1	861.4	859.2	860.4	865.6	863.5	863.5	866.6
10°	843.4	845.5	847.6	847.6	852.9	850.9	850.9	857.1	855.0	856.1	860.4
12.5°	829.6	832.9	836.0	837.0	842.4	839.1	840.2	847.6	846.6	847.6	851.9
15°	814.9	819.1	822.2	822.2	828.6	825.4	828.6	836.0	833.9	838.1	843.4
17.5°	797.9	802.1	806.4	807.4	813.8	811.6	815.9	823.2	823.2	825.4	831.8
20°	782.0	787.4	789.4	792.6	799.0	797.9	800.0	808.5	808.5	811.6	818.0
22.5°	760.9	766.1	770.4	773.6	778.9	778.9	782.0	789.4	789.4	791.5	797.9
25°	737.6	743.9	747.1	750.2	755.6	754.5	757.8	764.0	765.1	767.2	773.6
27.5°	708.0	713.2	717.5	719.6	727.0	722.8	726.0	733.4	732.2	734.4	739.8
30°	670.9	676.2	680.5	680.5	686.8	686.8	690.0	693.1	693.1	695.2	699.5
32.5°	627.5	633.9	633.9	637.0	641.2	637.0	641.2	645.5	643.4	646.6	649.8
35°	577.8	581.0	582.0	582.0	585.2	584.1	583.1	586.2	584.1	589.4	592.6
37.5°	517.5	521.8	519.6	521.8	520.6	517.5	517.5	522.8	518.5	519.6	522.8
40°	459.2	459.2	458.2	452.9	454.0	450.8	449.8	450.8	446.6	445.5	449.8
42.5°	399.0	397.9	394.8	387.2	388.4	383.1	378.9	378.9	376.8	375.6	376.8
45°	345.0	341.8	336.5	328.0	325.9	321.8	313.2	311.1	308.0	308.0	309.0
47.5°	295.2	291.0	282.5	273.0	267.8	262.5	254.0	250.8	245.5	243.4	245.5
50°	254.0	246.6	236.0	222.2	216.9	210.6	202.1	196.9	191.5	189.4	188.4
52.5°	215.9	205.2	194.8	177.8	173.5	167.2	155.5	150.2	145.0	140.8	140.8
55°	183.1	173.5	158.8	142.9	136.5	130.1	118.5	111.1	105.9	103.8	101.6
57.5°	153.5	142.9	129.1	112.1	105.9	99.5	87.9	80.4	75.1	72.0	69.9
60°	129.1	117.5	103.8	88.9	81.5	75.1	63.5	56.1	50.8	47.6	45.5
62.5°	105.9	96.2	82.5	68.8	62.4	56.1	46.5	39.1	33.9	31.8	28.6
65°	88.9	79.4	66.6	55.0	49.8	43.4	34.9	28.6	24.4	21.1	19.0
67.5°	72.0	64.5	54.0	43.4	38.1	33.9	26.5	21.1	16.9	14.9	13.8
70°	57.1	49.8	41.2	32.8	29.6	25.4	20.1	14.9	12.8	10.6	9.5
72.5°	42.4	37.0	30.8	24.4	21.1	19.0	13.8	11.6	8.5	7.4	6.4
75°	30.8	26.5	22.2	16.9	14.9	13.8	10.6	7.4	6.4	5.2	4.2
77.5°	21.1	19.0	14.9	11.6	10.6	9.5	7.4	5.2	4.2	3.1	3.1
80°	13.8	11.6	9.5	7.4	7.4	6.4	4.2	3.1	3.1	2.1	2.1
82.5°	8.5	7.4	6.4	5.2	4.2	4.2	3.1	2.1	2.1	1.0	1.0
85°	5.2	4.2	3.1	3.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0
87.5°	2.1	2.1	2.1	1.0	1.0	1.0	1.0	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2
2.5°	875.1	875.1	877.2	874.1	876.2	876.2	878.4	874.1	876.2	877.2	879.4
5°	870.9	872.0	874.1	873.0	874.1	874.1	876.2	870.9	875.1	875.1	878.4
7.5°	866.6	866.6	868.8	867.8	869.9	870.9	873.0	868.8	873.0	873.0	876.2
10°	861.4	861.4	864.6	863.5	866.6	867.8	870.9	866.6	870.9	872.0	875.1
12.5°	854.0	855.0	858.2	858.2	861.4	863.5	866.6	864.6	869.9	870.9	875.1
15°	845.5	847.6	851.9	850.9	854.0	857.1	861.4	858.2	865.6	867.8	872.0
17.5°	835.0	837.0	840.2	840.2	843.4	845.5	850.9	848.8	855.0	856.1	861.4
20°	819.1	822.2	826.5	825.4	828.6	830.8	835.0	832.9	839.1	841.2	846.6
22.5°	800.0	802.1	805.2	805.2	808.5	810.6	814.9	811.6	818.0	819.1	823.2
25°	774.6	776.8	778.9	779.9	783.1	784.1	786.2	784.1	789.4	790.5	795.8
27.5°	741.9	742.9	746.0	746.0	748.1	749.2	752.4	748.1	755.6	755.6	758.8
30°	702.6	701.6	705.9	703.8	705.9	705.9	709.0	706.9	712.1	710.1	713.2
32.5°	650.8	652.9	652.9	650.8	655.0	654.0	654.0	651.9	655.0	656.1	658.2
35°	590.5	593.6	593.6	594.8	595.8	592.6	593.6	587.4	592.6	593.6	594.8
37.5°	524.9	521.8	523.9	520.6	526.0	519.6	519.6	515.4	519.6	519.6	520.6
40°	449.8	448.6	450.8	448.6	447.6	446.6	444.5	441.2	445.5	443.4	446.6
42.5°	378.9	377.8	377.8	375.6	374.6	374.6	372.5	370.4	369.4	369.4	374.6
45°	305.9	308.0	305.9	304.8	306.9	304.8	305.9	301.6	303.8	301.6	303.8
47.5°	244.5	245.5	243.4	241.2	244.5	241.2	241.2	238.1	242.4	242.4	240.2
50°	189.4	188.4	186.2	188.4	187.2	187.2	187.2	184.1	186.2	183.1	185.2
52.5°	139.6	138.6	138.6	137.6	138.6	137.6	137.6	136.5	136.5	135.5	136.5
55°	101.6	100.5	98.4	98.4	98.4	99.5	98.4	97.4	97.4	96.2	97.4
57.5°	68.8	66.6	66.6	66.6	66.6	65.6	65.6	64.5	65.6	64.5	65.6
60°	44.5	44.5	42.4	42.4	42.4	42.4	42.4	41.2	42.4	42.4	42.4
62.5°	27.5	27.5	26.5	25.4	26.5	25.4	25.4	25.4	26.5	25.4	26.5
65°	18.0	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
67.5°	12.8	11.6	11.6	11.6	11.6	11.6	11.6	10.6	11.6	11.6	11.6
70°	8.5	8.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
72.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
75°	4.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	3.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	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	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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°	876.2	876.2	876.2	876.2	876.2	876.2	876.2	876.2
2.5°	876.2	877.2	875.1	876.2	874.1	876.2	877.2	879.4
5°	874.1	875.1	873.0	875.1	873.0	875.1	876.2	878.4
7.5°	872.0	874.1	872.0	874.1	872.0	874.1	875.1	877.2
10°	872.0	875.1	873.0	876.2	873.0	875.1	877.2	878.4
12.5°	872.0	875.1	874.1	876.2	875.1	877.2	879.4	881.5
15°	869.9	873.0	870.9	874.1	873.0	874.1	878.4	878.4
17.5°	858.2	861.4	861.4	863.5	863.5	866.6	868.8	870.9
20°	843.4	846.6	845.5	848.8	848.8	851.9	854.0	856.1
22.5°	821.1	825.4	824.4	827.5	826.5	828.6	832.9	831.8
25°	792.6	797.9	796.9	799.0	797.9	797.9	800.0	801.1
27.5°	757.8	760.9	759.8	761.9	759.8	761.9	764.0	765.1
30°	712.1	714.2	713.2	714.2	713.2	715.4	716.4	718.5
32.5°	657.1	660.4	657.1	659.2	658.2	658.2	662.5	660.4
35°	591.5	592.6	593.6	593.6	591.5	592.6	594.8	594.8
37.5°	518.5	523.9	517.5	520.6	519.6	519.6	519.6	522.8
40°	442.4	443.4	441.2	441.2	441.2	440.2	444.5	443.4
42.5°	370.4	371.4	370.4	367.2	368.2	368.2	371.4	367.2
45°	300.5	302.6	301.6	301.6	299.5	299.5	300.5	298.4
47.5°	238.1	240.2	237.0	238.1	236.0	238.1	237.0	239.1
50°	181.0	183.1	182.0	183.1	183.1	181.0	184.1	179.9
52.5°	135.5	136.5	135.5	134.4	133.4	133.4	135.5	134.4
55°	96.2	95.2	95.2	95.2	96.2	96.2	95.2	94.1
57.5°	64.5	64.5	63.5	63.5	64.5	62.4	63.5	62.4
60°	41.2	41.2	41.2	41.2	40.2	41.2	41.2	41.2
62.5°	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
65°	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
67.5°	10.6	11.6	11.6	11.6	10.6	10.6	10.6	10.6
70°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
72.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
75°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	1.0	1.0	1.0	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)