

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: P252679

Luminaire Tested: **LE_6B20D010 EC6B10209024 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252679
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B20D010 EC6B10209024 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1718.7 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

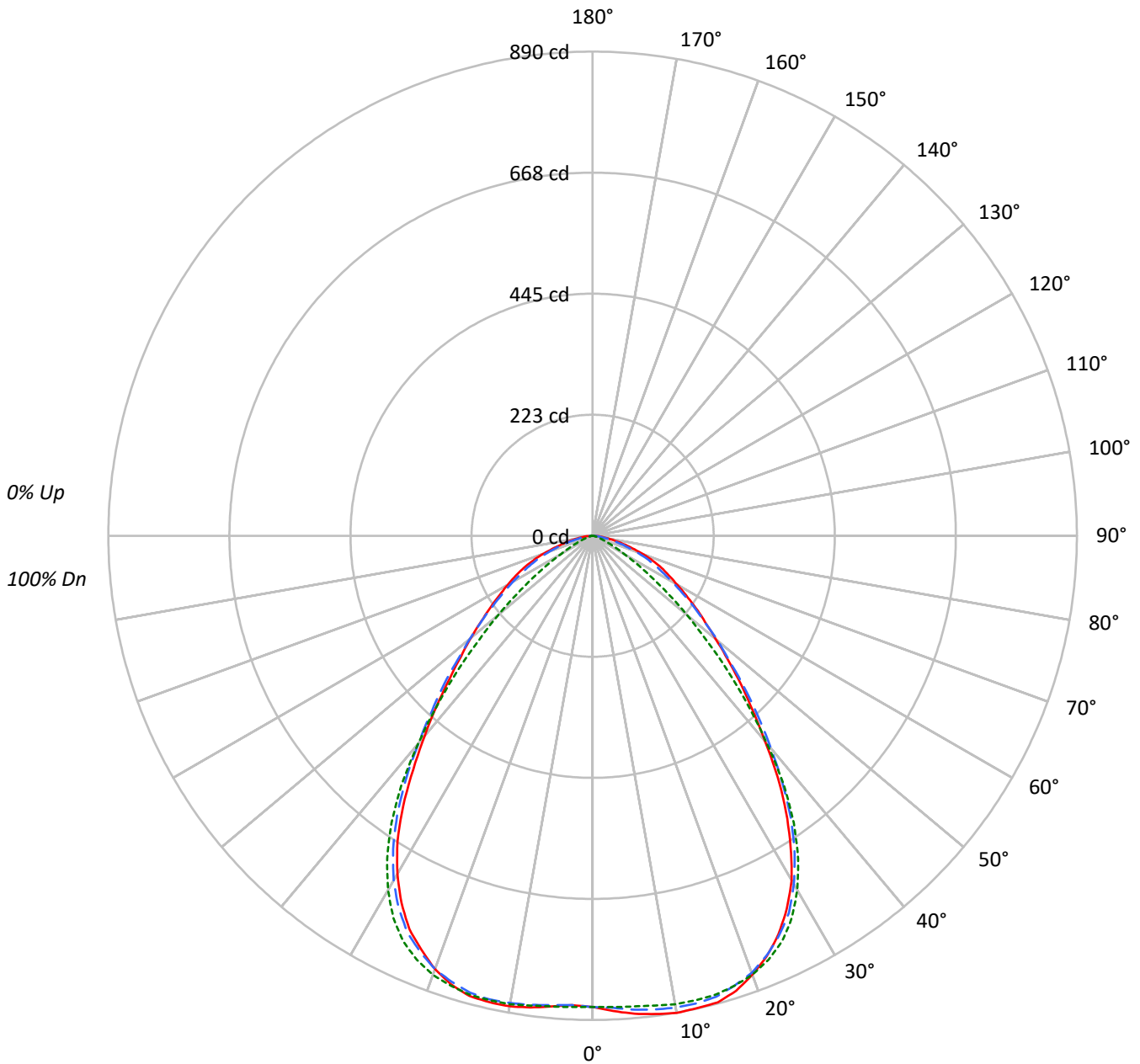
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	56498	56498	56498
5°	57755	56871	56871
10°	58993	57933	58178
15°	59977	58978	59153
20°	59611	59611	58847
25°	58193	59251	57401
30°	55084	56651	54074
35°	49363	51307	48384
40°	41936	42455	40888
45°	35485	32431	34239
50°	29952	22877	29586
55°	26332	14775	26047
60°	23343	8794	23487
65°	21550	5280	21550
70°	18694	3033	18217
75°	14822	1865	13889
80°	11046	1353	10557
85°	10105	898	9132



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.4	4.9
10°-20°	246.7	14.4
20°-30°	371.1	21.6
30°-40°	390.2	22.7
40°-50°	291.5	17.0
50°-60°	181.4	10.6
60°-70°	103.2	6.0
70°-80°	42.5	2.5
80°-90°	8.8	0.5
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°	701.2	40.8
0°-40°	1091.4	63.5
0°-60°	1564.3	91.0
0°-90°	1718.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1718.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	866	866	866	866	866	
5°	882	874	868	866	868	84
15°	888	877	873	870	876	250
25°	808	811	823	805	797	370
35°	620	636	644	626	608	385
45°	385	393	352	386	371	298
55°	232	227	130	223	229	208
65°	140	125	34	125	140	137
75°	59	46	7	45	55	64
85°	14	9	1	7	12	15
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°	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0
2.5°	874.5	873.2	874.5	872.1	870.9	870.9	872.1	869.6	868.4	869.6	868.4
5°	881.9	879.4	880.6	879.4	877.0	877.0	878.2	874.5	874.5	875.8	874.5
7.5°	886.8	886.8	886.8	884.4	883.1	881.9	884.4	880.6	879.4	879.4	878.2
10°	890.5	889.2	890.5	888.0	885.5	884.4	886.8	884.4	881.9	884.4	880.6
12.5°	889.2	889.2	889.2	888.0	885.5	884.4	886.8	883.1	881.9	883.1	880.6
15°	888.0	884.4	885.5	884.4	880.6	880.6	881.9	878.2	875.8	879.4	877.0
17.5°	877.0	874.5	875.8	873.2	870.9	869.6	870.9	869.6	867.1	869.6	867.1
20°	858.6	858.6	859.9	857.4	854.9	853.8	856.1	853.8	851.2	854.9	854.9
22.5°	836.5	836.5	836.5	835.4	834.1	834.1	834.1	832.9	831.6	834.1	835.4
25°	808.4	807.1	808.4	809.6	808.4	807.1	808.4	808.4	805.9	810.9	810.9
27.5°	772.9	772.9	775.2	774.1	774.1	772.9	775.2	775.2	774.1	777.8	781.4
30°	731.2	728.8	731.2	731.2	732.5	732.5	733.6	733.6	733.6	737.4	739.8
32.5°	677.4	678.5	682.2	681.0	679.8	683.5	683.5	685.9	687.1	689.6	690.8
35°	619.8	621.0	621.0	622.2	624.6	622.2	628.4	627.1	628.4	633.2	635.6
37.5°	558.5	554.9	561.0	558.5	559.8	559.8	562.2	563.4	567.1	573.2	573.2
40°	492.4	493.6	496.0	497.2	498.5	498.5	498.5	502.1	503.4	510.8	509.5
42.5°	434.8	434.8	437.2	438.5	438.5	438.5	438.5	442.1	444.6	447.0	449.5
45°	384.6	380.9	383.4	383.4	385.9	384.6	387.0	389.5	390.8	394.4	393.1
47.5°	336.9	335.6	336.9	338.0	336.9	338.0	339.2	340.5	341.8	341.8	341.8
50°	295.1	295.1	296.4	297.6	297.6	297.6	297.6	298.9	298.9	301.2	298.9
52.5°	260.9	262.1	262.1	260.9	262.1	262.1	263.4	263.4	262.1	262.1	258.4
55°	231.5	230.2	231.5	230.2	231.5	231.5	230.2	230.2	229.0	227.9	226.6
57.5°	203.4	203.4	203.4	203.4	202.1	203.4	202.1	200.9	200.9	198.4	194.8
60°	178.9	178.9	178.9	178.9	178.9	177.6	178.9	177.6	175.1	172.8	167.8
62.5°	158.0	156.8	158.0	156.8	156.8	155.5	155.5	154.4	151.9	149.4	144.5
65°	139.6	140.9	139.6	139.6	138.4	137.1	137.1	136.0	132.2	129.9	124.9
67.5°	120.0	118.8	118.8	118.8	117.6	117.6	117.6	115.1	112.6	109.0	104.1
70°	98.0	98.0	98.0	96.8	96.8	95.5	95.5	94.2	91.9	89.4	83.2
72.5°	77.1	77.1	77.1	74.8	76.0	74.8	74.8	72.2	71.0	67.4	63.8
75°	58.8	58.8	57.6	57.6	56.4	55.1	55.1	53.9	52.6	50.2	46.5
77.5°	42.9	42.9	42.9	41.6	40.4	39.2	39.2	38.0	36.8	35.5	33.1
80°	29.4	29.4	29.4	29.4	28.1	27.0	27.0	25.8	25.8	24.5	22.0
82.5°	19.6	19.6	19.6	19.6	18.4	18.4	18.4	17.1	15.9	15.9	13.5
85°	13.5	13.5	12.2	12.2	12.2	12.2	11.0	11.0	9.8	8.6	8.6
87.5°	7.4	7.4	7.4	7.4	6.1	6.1	6.1	6.1	4.9	4.9	3.6
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°	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0
2.5°	872.1	872.1	870.9	867.1	868.4	867.1	868.4	867.1	863.5	867.1	863.5
5°	877.0	878.2	875.8	870.9	872.1	870.9	870.9	869.6	866.0	868.4	866.0
7.5°	881.9	880.6	879.4	874.5	875.8	874.5	874.5	872.1	868.4	870.9	867.1
10°	884.4	884.4	881.9	877.0	877.0	875.8	877.0	875.8	870.9	874.5	872.1
12.5°	884.4	883.1	883.1	877.0	878.2	877.0	878.2	875.8	872.1	874.5	873.2
15°	880.6	880.6	879.4	873.2	874.5	874.5	875.8	873.2	869.6	873.2	870.9
17.5°	873.2	873.2	872.1	867.1	869.6	869.6	870.9	868.4	864.8	867.1	867.1
20°	858.6	859.9	859.9	856.1	858.6	858.6	859.9	858.6	857.4	858.6	856.1
22.5°	841.5	843.9	843.9	840.2	842.6	842.6	846.4	845.1	842.6	843.9	842.6
25°	815.8	818.1	820.6	818.1	820.6	820.6	824.2	823.1	820.6	823.1	819.4
27.5°	786.4	787.5	790.0	787.5	791.2	790.0	793.6	792.5	788.8	792.5	791.2
30°	744.6	749.6	753.2	749.6	753.2	753.2	755.8	754.5	753.2	752.0	752.0
32.5°	698.1	703.0	703.0	701.9	704.2	704.2	705.5	703.0	701.9	703.0	704.2
35°	640.6	643.0	645.5	644.2	645.5	646.8	645.5	646.8	643.0	644.2	644.2
37.5°	578.1	580.5	580.5	576.9	579.4	579.4	576.9	576.9	574.4	576.9	572.0
40°	512.0	509.5	510.8	508.2	505.9	505.9	504.6	499.8	497.2	498.5	499.8
42.5°	447.0	447.0	443.4	437.2	431.1	431.1	427.5	425.0	420.1	422.5	421.4
45°	392.0	385.9	380.9	371.1	367.5	365.0	358.9	352.8	350.2	351.5	350.2
47.5°	339.2	334.4	322.1	308.6	305.0	301.2	294.0	286.6	284.1	281.8	281.8
50°	295.1	286.6	273.1	258.4	252.2	246.1	236.4	229.0	224.1	225.4	225.4
52.5°	254.8	245.0	229.0	210.6	203.4	196.0	187.4	178.9	175.1	173.9	173.9
55°	219.2	208.2	192.2	171.5	165.4	156.8	145.8	136.0	131.0	129.9	132.2
57.5°	187.4	177.6	159.2	138.4	131.0	122.5	111.5	102.9	96.8	95.5	96.8
60°	161.6	148.2	132.2	112.6	102.9	95.5	83.2	76.0	69.9	67.4	68.6
62.5°	136.0	123.8	107.8	88.1	80.9	73.5	62.5	53.9	49.0	47.8	49.0
65°	116.4	104.1	89.4	72.2	64.9	57.6	47.8	39.2	35.5	34.2	35.5
67.5°	96.8	85.8	73.5	57.6	51.5	45.4	35.5	29.4	24.5	23.2	24.5
70°	78.4	68.6	56.4	45.4	39.2	34.2	27.0	20.9	17.1	15.9	17.1
72.5°	58.8	51.5	42.9	33.1	29.4	25.8	19.6	14.8	12.2	11.0	12.2
75°	42.9	36.8	30.6	23.2	20.9	18.4	13.5	9.8	8.6	7.4	8.6
77.5°	29.4	25.8	20.9	15.9	13.5	12.2	8.6	7.4	6.1	4.9	4.9
80°	19.6	17.1	13.5	11.0	9.8	8.6	6.1	4.9	3.6	3.6	3.6
82.5°	12.2	9.8	8.6	6.1	4.9	4.9	3.6	2.5	2.5	2.5	2.5
85°	7.4	6.1	4.9	3.6	2.5	2.5	1.2	1.2	1.2	1.2	1.2
87.5°	3.6	2.5	2.5	1.2	1.2	1.2	1.2	1.2	0.0	0.0	1.2
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0
2.5°	866.0	863.5	863.5	864.8	866.0	867.1	864.8	863.5	863.5	867.1	864.8
5°	866.0	864.8	864.8	864.8	867.1	868.4	866.0	864.8	866.0	869.6	868.4
7.5°	869.6	867.1	868.4	868.4	869.6	872.1	869.6	868.4	869.6	873.2	870.9
10°	872.1	869.6	870.9	869.6	873.2	874.5	872.1	870.9	872.1	877.0	875.8
12.5°	873.2	872.1	872.1	870.9	874.5	875.8	873.2	872.1	873.2	877.0	875.8
15°	870.9	869.6	869.6	869.6	872.1	874.5	870.9	869.6	869.6	873.2	872.1
17.5°	866.0	863.5	863.5	863.5	864.8	866.0	862.2	861.0	859.9	863.5	862.2
20°	857.4	854.9	852.5	852.5	853.8	853.8	851.2	847.6	847.6	848.8	846.4
22.5°	841.5	840.2	837.8	836.5	839.0	837.8	832.9	829.2	828.0	829.2	826.8
25°	819.4	817.0	815.8	814.5	815.8	814.5	809.6	804.8	804.8	804.8	801.0
27.5°	788.8	786.4	785.1	785.1	786.4	783.9	779.0	774.1	771.6	771.6	768.0
30°	749.6	749.6	748.4	747.1	745.9	745.9	738.5	733.6	731.2	732.5	730.0
32.5°	701.9	700.6	699.4	695.8	696.9	695.8	689.6	685.9	682.2	679.8	678.5
35°	640.6	640.6	639.4	639.4	639.4	638.1	632.0	628.4	625.9	624.6	621.0
37.5°	573.2	572.0	570.8	570.8	570.8	570.8	567.1	563.4	563.4	562.2	559.8
40°	497.2	498.5	499.8	498.5	502.1	505.9	501.0	498.5	497.2	501.0	496.0
42.5°	423.8	422.5	428.6	429.9	429.9	436.0	437.2	438.5	437.2	439.8	439.8
45°	352.8	351.5	357.6	360.1	366.2	373.6	377.2	383.4	385.9	388.2	385.9
47.5°	285.4	290.2	295.1	301.2	306.2	318.5	325.8	331.9	334.4	338.0	338.0
50°	229.0	234.0	242.5	247.4	253.5	268.2	280.5	289.0	294.0	297.6	296.4
52.5°	176.4	185.0	196.0	200.9	209.5	226.6	240.1	249.9	256.0	259.6	260.9
55°	136.0	143.2	154.4	161.6	170.2	188.6	205.8	216.8	222.9	227.9	230.2
57.5°	100.4	109.0	121.2	127.4	137.1	158.0	172.8	186.1	193.5	199.6	200.9
60°	73.5	82.0	93.1	100.4	110.2	131.0	148.2	160.5	169.0	173.9	176.4
62.5°	52.6	61.2	72.2	79.6	88.1	106.5	123.8	136.0	144.5	150.6	154.4
65°	38.0	46.5	57.6	63.8	71.0	88.1	104.1	116.4	124.9	132.2	134.8
67.5°	28.1	34.2	44.1	50.2	57.6	71.0	84.5	95.5	104.1	110.2	112.6
70°	20.9	25.8	34.2	38.0	42.9	55.1	66.1	76.0	83.2	88.1	90.6
72.5°	14.8	18.4	24.5	28.1	31.9	41.6	50.2	57.6	62.5	67.4	69.9
75°	9.8	12.2	17.1	19.6	22.0	29.4	35.5	41.6	45.4	49.0	50.2
77.5°	6.1	8.6	12.2	13.5	15.9	19.6	24.5	28.1	30.6	33.1	35.5
80°	3.6	4.9	7.4	8.6	9.8	13.5	15.9	18.4	20.9	23.2	24.5
82.5°	2.5	3.6	4.9	4.9	6.1	7.4	9.8	12.2	13.5	14.8	15.9
85°	1.2	1.2	2.5	2.5	3.6	3.6	4.9	6.1	7.4	8.6	9.8
87.5°	1.2	1.2	1.2	1.2	2.5	2.5	3.6	3.6	3.6	4.9	4.9
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°	866.0	866.0	866.0	866.0	866.0	866.0	866.0	866.0
2.5°	862.2	866.0	862.2	864.8	863.5	863.5	862.2	863.5
5°	866.0	870.9	866.0	869.6	867.1	867.1	867.1	868.4
7.5°	869.6	874.5	870.9	874.5	873.2	872.1	872.1	874.5
10°	873.2	877.0	874.5	878.2	877.0	875.8	875.8	878.2
12.5°	873.2	878.2	875.8	879.4	878.2	877.0	877.0	878.2
15°	869.6	875.8	872.1	875.8	874.5	873.2	873.2	875.8
17.5°	858.6	863.5	861.0	863.5	863.5	862.2	863.5	864.8
20°	843.9	847.6	845.1	847.6	847.6	845.1	846.4	847.6
22.5°	823.1	826.8	824.2	826.8	825.5	824.2	824.2	823.1
25°	797.4	802.2	798.6	801.0	798.6	796.1	796.1	797.4
27.5°	765.5	769.1	764.2	766.8	764.2	761.9	761.9	760.6
30°	723.9	725.1	721.4	723.9	721.4	720.2	717.8	717.8
32.5°	673.6	674.9	671.2	671.2	668.8	668.8	663.9	667.5
35°	614.9	616.1	614.9	613.6	610.0	608.8	607.5	607.5
37.5°	553.6	553.6	550.0	548.8	546.2	543.9	545.0	541.4
40°	491.1	489.9	486.2	487.5	486.2	482.6	481.4	480.1
42.5°	432.4	432.4	428.6	429.9	427.5	426.2	422.5	423.8
45°	380.9	380.9	377.2	377.2	376.0	372.4	373.6	371.1
47.5°	334.4	334.4	333.1	333.1	329.5	328.2	328.2	328.2
50°	294.0	294.0	294.0	294.0	292.8	291.5	290.2	291.5
52.5°	259.6	262.1	260.9	260.9	259.6	258.4	257.2	257.2
55°	229.0	230.2	230.2	231.5	230.2	229.0	230.2	229.0
57.5°	202.1	204.5	204.5	204.5	204.5	204.5	203.4	202.1
60°	178.9	180.0	180.0	181.2	181.2	181.2	180.0	180.0
62.5°	155.5	158.0	159.2	159.2	160.5	159.2	159.2	159.2
65°	137.1	139.6	140.9	139.6	140.9	140.9	139.6	139.6
67.5°	115.1	117.6	117.6	117.6	117.6	118.8	117.6	117.6
70°	93.1	95.5	94.2	95.5	95.5	95.5	95.5	95.5
72.5°	71.0	72.2	73.5	73.5	74.8	73.5	73.5	73.5
75°	51.5	53.9	53.9	53.9	53.9	55.1	55.1	55.1
77.5°	36.8	38.0	38.0	39.2	39.2	39.2	39.2	40.4
80°	25.8	25.8	27.0	27.0	28.1	28.1	28.1	28.1
82.5°	17.1	18.4	18.4	18.4	18.4	18.4	18.4	18.4
85°	9.8	11.0	11.0	11.0	11.0	12.2	12.2	12.2
87.5°	6.1	6.1	6.1	6.1	6.1	6.1	4.9	4.9
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)