

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: P252664

Luminaire Tested: **LE\_6B15D010 EC6B10208040 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252664  
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\_6B15D010 EC6B10208040 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1772.5 lumens  
Efficiency: N/A  
Efficacy: 123.1 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

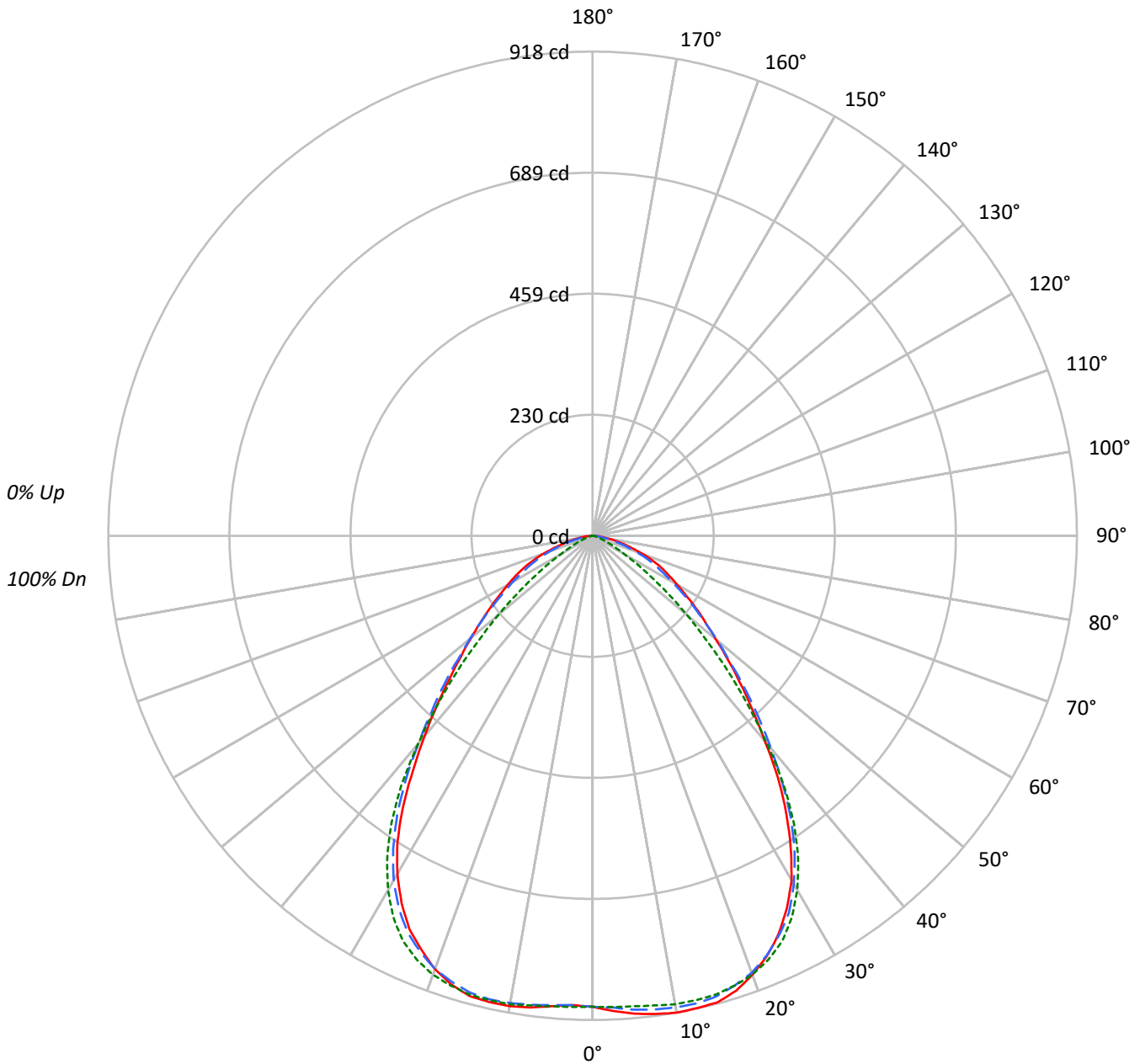
Input Watts (W): 14.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	58260	58260	58260
5°	59563	58646	58646
10°	60828	59748	59993
15°	61855	60828	60997
20°	61478	61478	60687
25°	60007	61108	59186
30°	56809	58421	55754
35°	50901	52916	49897
40°	43247	43784	42165
45°	36592	33446	35319
50°	30896	23588	30510
55°	27162	15230	26866
60°	24061	9068	24217
65°	22230	5465	22230
70°	19266	3128	18789
75°	15275	1916	14343
80°	11421	1428	10895
85°	10405	898	9432



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.0	4.9
10°-20°	254.5	14.4
20°-30°	382.7	21.6
30°-40°	402.4	22.7
40°-50°	300.6	17.0
50°-60°	187.1	10.6
60°-70°	106.4	6.0
70°-80°	43.8	2.5
80°-90°	9.1	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°	723.1	40.8
0°-40°	1125.5	63.5
0°-60°	1613.2	91.0
0°-90°	1772.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1772.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	893	893	893	893	893	
5°	910	902	896	893	896	87
15°	916	904	901	897	903	257
25°	834	836	849	830	822	382
35°	639	656	664	646	626	397
45°	397	406	362	398	383	307
55°	239	234	134	230	236	215
65°	144	129	35	129	144	142
75°	61	48	8	47	57	66
85°	14	9	1	8	13	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°	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0
2.5°	901.9	900.6	901.9	899.4	898.1	898.1	899.4	896.9	895.5	896.9	895.5
5°	909.5	906.9	908.1	906.9	904.4	904.4	905.6	901.9	901.9	903.1	901.9
7.5°	914.5	914.5	914.5	912.0	910.8	909.5	912.0	908.1	906.9	906.9	905.6
10°	918.2	917.0	918.2	915.8	913.2	912.0	914.5	912.0	909.5	912.0	908.1
12.5°	917.0	917.0	917.0	915.8	913.2	912.0	914.5	910.8	909.5	910.8	908.1
15°	915.8	912.0	913.2	912.0	908.1	908.1	909.5	905.6	903.1	906.9	904.4
17.5°	904.4	901.9	903.1	900.6	898.1	896.9	898.1	896.9	894.2	896.9	894.2
20°	885.5	885.5	886.8	884.1	881.6	880.4	882.9	880.4	877.9	881.6	881.6
22.5°	862.8	862.8	862.8	861.5	860.1	860.1	860.1	858.9	857.6	860.1	861.5
25°	833.6	832.4	833.6	834.9	833.6	832.4	833.6	833.6	831.1	836.1	836.1
27.5°	797.0	797.0	799.5	798.2	798.2	797.0	799.5	799.5	798.2	802.1	805.9
30°	754.1	751.5	754.1	754.1	755.4	755.4	756.6	756.6	756.6	760.4	762.9
32.5°	698.5	699.8	703.5	702.2	701.0	704.9	704.9	707.4	708.6	711.1	712.4
35°	639.1	640.4	640.4	641.6	644.2	641.6	648.0	646.8	648.0	653.0	655.5
37.5°	576.0	572.2	578.5	576.0	577.2	577.2	579.8	581.0	584.9	591.1	591.1
40°	507.8	509.0	511.5	512.9	514.1	514.1	514.1	517.9	519.1	526.8	525.5
42.5°	448.4	448.4	450.9	452.2	452.2	452.2	452.2	456.0	458.5	461.0	463.6
45°	396.6	392.9	395.4	395.4	397.9	396.6	399.1	401.6	402.9	406.8	405.5
47.5°	347.4	346.1	347.4	348.6	347.4	348.6	349.9	351.1	352.4	352.4	352.4
50°	304.4	304.4	305.6	306.9	306.9	306.9	306.9	308.2	308.2	310.8	308.2
52.5°	269.0	270.2	270.2	269.0	270.2	270.2	271.6	271.6	270.2	270.2	266.5
55°	238.8	237.5	238.8	237.5	238.8	238.8	237.5	237.5	236.2	235.0	233.6
57.5°	209.6	209.6	209.6	209.6	208.4	209.6	208.4	207.1	207.1	204.6	200.9
60°	184.4	184.4	184.4	184.4	184.4	183.1	184.4	183.1	180.6	178.1	173.0
62.5°	163.0	161.6	163.0	161.6	161.6	160.4	160.4	159.1	156.6	154.1	149.0
65°	144.0	145.2	144.0	144.0	142.8	141.5	141.5	140.2	136.4	133.9	128.9
67.5°	123.8	122.5	122.5	122.5	121.2	121.2	121.2	118.8	116.2	112.4	107.4
70°	101.0	101.0	101.0	99.8	99.8	98.5	98.5	97.2	94.8	92.2	85.9
72.5°	79.6	79.6	79.6	77.0	78.4	77.0	77.0	74.5	73.2	69.5	65.6
75°	60.6	60.6	59.4	59.4	58.1	56.9	56.9	55.6	54.4	51.8	48.0
77.5°	44.2	44.2	44.2	43.0	41.6	40.4	40.4	39.1	37.9	36.6	34.1
80°	30.4	30.4	30.4	30.4	29.0	27.8	27.8	26.5	26.5	25.2	22.8
82.5°	20.2	20.2	20.2	20.2	19.0	19.0	19.0	17.6	16.4	16.4	13.9
85°	13.9	13.9	12.6	12.6	12.6	12.6	11.4	11.4	10.1	8.9	8.9
87.5°	7.6	7.6	7.6	7.6	6.4	6.4	6.4	6.4	5.0	5.0	3.8
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0
2.5°	899.4	899.4	898.1	894.2	895.5	894.2	895.5	894.2	890.5	894.2	890.5
5°	904.4	905.6	903.1	898.1	899.4	898.1	898.1	896.9	893.0	895.5	893.0
7.5°	909.5	908.1	906.9	901.9	903.1	901.9	901.9	899.4	895.5	898.1	894.2
10°	912.0	912.0	909.5	904.4	904.4	903.1	904.4	903.1	898.1	901.9	899.4
12.5°	912.0	910.8	910.8	904.4	905.6	904.4	905.6	903.1	899.4	901.9	900.6
15°	908.1	908.1	906.9	900.6	901.9	901.9	903.1	900.6	896.9	900.6	898.1
17.5°	900.6	900.6	899.4	894.2	896.9	896.9	898.1	895.5	891.8	894.2	894.2
20°	885.5	886.8	886.8	882.9	885.5	885.5	886.8	885.5	884.1	885.5	882.9
22.5°	867.8	870.2	870.2	866.5	869.0	869.0	872.9	871.5	869.0	870.2	869.0
25°	841.2	843.8	846.2	843.8	846.2	846.2	850.1	848.9	846.2	848.9	845.0
27.5°	810.9	812.1	814.8	812.1	816.0	814.8	818.5	817.2	813.5	817.2	816.0
30°	768.0	773.0	776.9	773.0	776.9	776.9	779.4	778.1	776.9	775.5	775.5
32.5°	720.0	725.0	725.0	723.8	726.2	726.2	727.5	725.0	723.8	725.0	726.2
35°	660.6	663.1	665.6	664.4	665.6	666.9	665.6	666.9	663.1	664.4	664.4
37.5°	596.2	598.8	598.8	594.9	597.5	597.5	594.9	594.9	592.4	594.9	589.9
40°	528.0	525.5	526.8	524.2	521.6	521.6	520.4	515.4	512.9	514.1	515.4
42.5°	461.0	461.0	457.2	450.9	444.6	444.6	440.9	438.2	433.2	435.8	434.5
45°	404.2	397.9	392.9	382.8	378.9	376.4	370.1	363.8	361.2	362.5	361.2
47.5°	349.9	344.9	332.2	318.2	314.5	310.8	303.1	295.6	293.0	290.5	290.5
50°	304.4	295.6	281.6	266.5	260.2	253.9	243.8	236.2	231.1	232.4	232.4
52.5°	262.8	252.6	236.2	217.2	209.6	202.1	193.2	184.4	180.6	179.4	179.4
55°	226.1	214.8	198.2	176.9	170.5	161.6	150.2	140.2	135.1	133.9	136.4
57.5°	193.2	183.1	164.2	142.8	135.1	126.2	115.0	106.1	99.8	98.5	99.8
60°	166.8	152.9	136.4	116.2	106.1	98.5	85.9	78.4	72.0	69.5	70.8
62.5°	140.2	127.6	111.1	91.0	83.4	75.8	64.4	55.6	50.5	49.2	50.5
65°	120.0	107.4	92.2	74.5	67.0	59.4	49.2	40.4	36.6	35.4	36.6
67.5°	99.8	88.4	75.8	59.4	53.0	46.8	36.6	30.4	25.2	24.0	25.2
70°	80.9	70.8	58.1	46.8	40.4	35.4	27.8	21.5	17.6	16.4	17.6
72.5°	60.6	53.0	44.2	34.1	30.4	26.5	20.2	15.1	12.6	11.4	12.6
75°	44.2	37.9	31.6	24.0	21.5	19.0	13.9	10.1	8.9	7.6	8.9
77.5°	30.4	26.5	21.5	16.4	13.9	12.6	8.9	7.6	6.4	5.0	5.0
80°	20.2	17.6	13.9	11.4	10.1	8.9	6.4	5.0	3.8	3.8	3.8
82.5°	12.6	10.1	8.9	6.4	5.0	5.0	3.8	2.5	2.5	2.5	2.5
85°	7.6	6.4	5.0	3.8	2.5	2.5	1.2	1.2	1.2	1.2	1.2
87.5°	3.8	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°	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0
2.5°	893.0	890.5	890.5	891.8	893.0	894.2	891.8	890.5	890.5	894.2	891.8
5°	893.0	891.8	891.8	891.8	894.2	895.5	893.0	891.8	893.0	896.9	895.5
7.5°	896.9	894.2	895.5	895.5	896.9	899.4	896.9	895.5	896.9	900.6	898.1
10°	899.4	896.9	898.1	896.9	900.6	901.9	899.4	898.1	899.4	904.4	903.1
12.5°	900.6	899.4	899.4	898.1	901.9	903.1	900.6	899.4	900.6	904.4	903.1
15°	898.1	896.9	896.9	896.9	899.4	901.9	898.1	896.9	896.9	900.6	899.4
17.5°	893.0	890.5	890.5	890.5	891.8	893.0	889.2	888.0	886.8	890.5	889.2
20°	884.1	881.6	879.1	879.1	880.4	880.4	877.9	874.1	874.1	875.4	872.9
22.5°	867.8	866.5	864.0	862.8	865.2	864.0	858.9	855.1	853.9	855.1	852.6
25°	845.0	842.5	841.2	840.0	841.2	840.0	834.9	829.9	829.9	829.9	826.1
27.5°	813.5	810.9	809.6	809.6	810.9	808.4	803.4	798.2	795.8	795.8	792.0
30°	773.0	773.0	771.8	770.5	769.2	769.2	761.6	756.6	754.1	755.4	752.9
32.5°	723.8	722.5	721.2	717.5	718.8	717.5	711.1	707.4	703.5	701.0	699.8
35°	660.6	660.6	659.4	659.4	659.4	658.1	651.8	648.0	645.5	644.2	640.4
37.5°	591.1	589.9	588.6	588.6	588.6	588.6	584.9	581.0	581.0	579.8	577.2
40°	512.9	514.1	515.4	514.1	517.9	521.6	516.6	514.1	512.9	516.6	511.5
42.5°	437.0	435.8	442.1	443.4	443.4	449.6	450.9	452.2	450.9	453.5	453.5
45°	363.8	362.5	368.9	371.4	377.6	385.2	389.0	395.4	397.9	400.4	397.9
47.5°	294.2	299.4	304.4	310.8	315.8	328.4	336.0	342.2	344.9	348.6	348.6
50°	236.2	241.2	250.1	255.1	261.5	276.6	289.2	298.1	303.1	306.9	305.6
52.5°	181.9	190.8	202.1	207.1	216.0	233.6	247.6	257.6	264.0	267.8	269.0
55°	140.2	147.8	159.1	166.8	175.6	194.5	212.2	223.6	229.9	235.0	237.5
57.5°	103.6	112.4	125.0	131.4	141.5	163.0	178.1	192.0	199.6	205.9	207.1
60°	75.8	84.6	96.0	103.6	113.6	135.1	152.9	165.5	174.2	179.4	181.9
62.5°	54.4	63.1	74.5	82.1	91.0	109.9	127.6	140.2	149.0	155.4	159.1
65°	39.1	48.0	59.4	65.6	73.2	91.0	107.4	120.0	128.9	136.4	139.0
67.5°	29.0	35.4	45.5	51.8	59.4	73.2	87.1	98.5	107.4	113.6	116.2
70°	21.5	26.5	35.4	39.1	44.2	56.9	68.2	78.4	85.9	91.0	93.5
72.5°	15.1	19.0	25.2	29.0	32.9	43.0	51.8	59.4	64.4	69.5	72.0
75°	10.1	12.6	17.6	20.2	22.8	30.4	36.6	43.0	46.8	50.5	51.8
77.5°	6.4	8.9	12.6	13.9	16.4	20.2	25.2	29.0	31.6	34.1	36.6
80°	3.8	5.0	7.6	8.9	10.1	13.9	16.4	19.0	21.5	24.0	25.2
82.5°	2.5	3.8	5.0	5.0	6.4	7.6	10.1	12.6	13.9	15.1	16.4
85°	1.2	1.2	2.5	2.5	3.8	3.8	5.0	6.4	7.6	8.9	10.1
87.5°	1.2	1.2	1.2	1.2	2.5	2.5	3.8	3.8	3.8	5.0	5.0
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°	893.0	893.0	893.0	893.0	893.0	893.0	893.0	893.0
2.5°	889.2	893.0	889.2	891.8	890.5	890.5	889.2	890.5
5°	893.0	898.1	893.0	896.9	894.2	894.2	894.2	895.5
7.5°	896.9	901.9	898.1	901.9	900.6	899.4	899.4	901.9
10°	900.6	904.4	901.9	905.6	904.4	903.1	903.1	905.6
12.5°	900.6	905.6	903.1	906.9	905.6	904.4	904.4	905.6
15°	896.9	903.1	899.4	903.1	901.9	900.6	900.6	903.1
17.5°	885.5	890.5	888.0	890.5	890.5	889.2	890.5	891.8
20°	870.2	874.1	871.5	874.1	874.1	871.5	872.9	874.1
22.5°	848.9	852.6	850.1	852.6	851.4	850.1	850.1	848.9
25°	822.2	827.4	823.5	826.1	823.5	821.0	821.0	822.2
27.5°	789.5	793.2	788.1	790.8	788.1	785.6	785.6	784.4
30°	746.5	747.8	744.0	746.5	744.0	742.8	740.1	740.1
32.5°	694.8	696.0	692.2	692.2	689.6	689.6	684.6	688.4
35°	634.1	635.4	634.1	632.9	629.0	627.8	626.5	626.5
37.5°	570.9	570.9	567.1	565.9	563.4	560.9	562.1	558.2
40°	506.5	505.2	501.5	502.8	501.5	497.6	496.4	495.1
42.5°	445.9	445.9	442.1	443.4	440.9	439.6	435.8	437.0
45°	392.9	392.9	389.0	389.0	387.8	384.0	385.2	382.8
47.5°	344.9	344.9	343.6	343.6	339.8	338.5	338.5	338.5
50°	303.1	303.1	303.1	303.1	301.9	300.6	299.4	300.6
52.5°	267.8	270.2	269.0	269.0	267.8	266.5	265.2	265.2
55°	236.2	237.5	237.5	238.8	237.5	236.2	237.5	236.2
57.5°	208.4	211.0	211.0	211.0	211.0	211.0	209.6	208.4
60°	184.4	185.6	185.6	187.0	187.0	187.0	185.6	185.6
62.5°	160.4	163.0	164.2	164.2	165.5	164.2	164.2	164.2
65°	141.5	144.0	145.2	144.0	145.2	145.2	144.0	144.0
67.5°	118.8	121.2	121.2	121.2	121.2	122.5	121.2	121.2
70°	96.0	98.5	97.2	98.5	98.5	98.5	98.5	98.5
72.5°	73.2	74.5	75.8	75.8	77.0	75.8	75.8	75.8
75°	53.0	55.6	55.6	55.6	55.6	56.9	56.9	56.9
77.5°	37.9	39.1	39.1	40.4	40.4	40.4	40.4	41.6
80°	26.5	26.5	27.8	27.8	29.0	29.0	29.0	29.0
82.5°	17.6	19.0	19.0	19.0	19.0	19.0	19.0	19.0
85°	10.1	11.4	11.4	11.4	11.4	12.6	12.6	12.6
87.5°	6.4	6.4	6.4	6.4	6.4	6.4	5.0	5.0
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)