

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: P252686

Luminaire Tested: **LE\_6B20D010 EC6B10209730 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252686  
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 EC6B10209730 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1775.0 lumens  
Efficiency: N/A  
Efficacy: 85.3 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

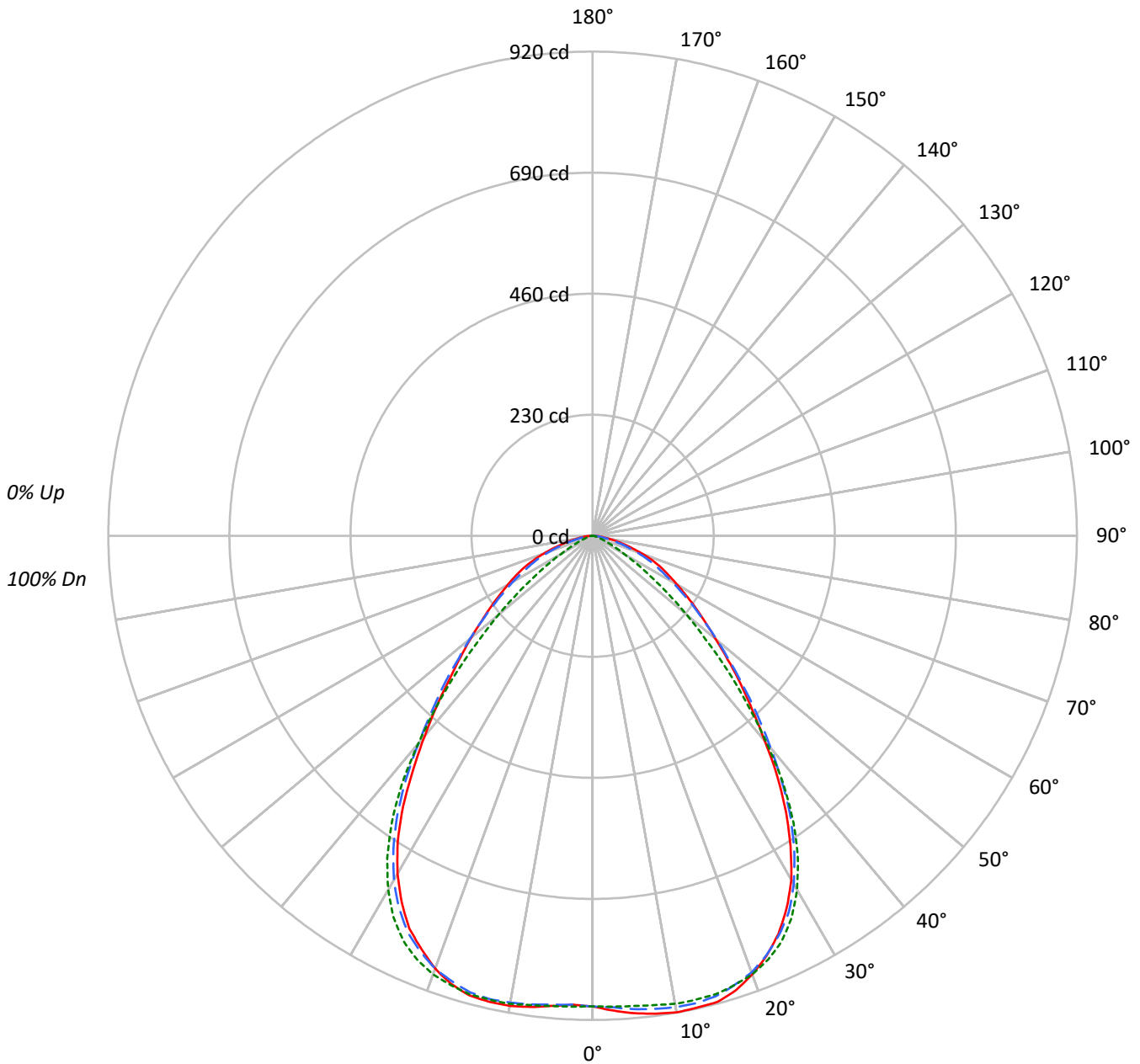
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					20					
RC	80					70					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°	58338	58338	58338
5°	59648	58738	58738
10°	60921	59828	60079
15°	61936	60916	61085
20°	61568	61568	60763
25°	60100	61187	59280
30°	56884	58504	55837
35°	50972	52995	49969
40°	43307	43852	42234
45°	36638	33492	35356
50°	30946	23628	30550
55°	27196	15253	26900
60°	24087	9081	24270
65°	22261	5465	22261
70°	19304	3147	18808
75°	15326	1916	14343
80°	11421	1428	10933
85°	10405	898	9432



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.1	4.9
10°-20°	254.8	14.4
20°-30°	383.2	21.6
30°-40°	402.9	22.7
40°-50°	301.0	17.0
50°-60°	187.4	10.6
60°-70°	106.6	6.0
70°-80°	43.9	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°	724.1	40.8
0°-40°	1127.1	63.5
0°-60°	1615.5	91.0
0°-90°	1775.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1775.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	894	894	894	894	894	
5°	911	903	897	894	897	87
15°	917	906	902	898	904	258
25°	835	837	850	831	824	382
35°	640	656	665	646	627	397
45°	397	406	363	398	383	308
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°	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2
2.5°	903.1	901.9	903.1	900.6	899.4	899.4	900.6	898.1	896.9	898.1	896.9
5°	910.8	908.2	909.5	908.2	905.6	905.6	906.9	903.1	903.1	904.4	903.1
7.5°	915.8	915.8	915.8	913.2	912.0	910.8	913.2	909.5	908.2	908.2	906.9
10°	919.6	918.4	919.6	917.0	914.5	913.2	915.8	913.2	910.8	913.2	909.5
12.5°	918.4	918.4	918.4	917.0	914.5	913.2	915.8	912.0	910.8	912.0	909.5
15°	917.0	913.2	914.5	913.2	909.5	909.5	910.8	906.9	904.4	908.2	905.6
17.5°	905.6	903.1	904.4	901.9	899.4	898.1	899.4	898.1	895.5	898.1	895.5
20°	886.8	886.8	888.0	885.4	882.9	881.6	884.1	881.6	879.1	882.9	882.9
22.5°	863.9	863.9	863.9	862.6	861.4	861.4	861.4	860.1	858.9	861.4	862.6
25°	834.9	833.6	834.9	836.1	834.9	833.6	834.9	834.9	832.2	837.4	837.4
27.5°	798.1	798.1	800.6	799.4	799.4	798.1	800.6	800.6	799.4	803.2	807.0
30°	755.1	752.6	755.1	755.1	756.4	756.4	757.6	757.6	757.6	761.5	764.0
32.5°	699.5	700.8	704.5	703.2	702.0	705.9	705.9	708.4	709.6	712.1	713.4
35°	640.0	641.2	641.2	642.6	645.1	642.6	648.9	647.6	648.9	654.0	656.5
37.5°	576.8	573.0	579.4	576.8	578.0	578.0	580.6	581.9	585.6	592.0	592.0
40°	508.5	509.8	512.2	513.5	514.9	514.9	514.9	518.6	519.9	527.5	526.2
42.5°	449.0	449.0	451.6	452.9	452.9	452.9	452.9	456.6	459.1	461.8	464.2
45°	397.1	393.4	395.9	395.9	398.5	397.1	399.8	402.2	403.5	407.2	406.0
47.5°	347.9	346.6	347.9	349.1	347.9	349.1	350.4	351.6	352.9	352.9	352.9
50°	304.9	304.9	306.1	307.4	307.4	307.4	307.4	308.6	308.6	311.1	308.6
52.5°	269.4	270.8	270.8	269.4	270.8	270.8	272.0	272.0	270.8	270.8	266.9
55°	239.1	237.8	239.1	237.8	239.1	239.1	237.8	237.8	236.5	235.2	234.0
57.5°	210.0	210.0	210.0	210.0	208.8	210.0	208.8	207.5	207.5	204.9	201.1
60°	184.6	184.6	184.6	184.6	184.6	183.4	184.6	183.4	180.9	178.4	173.2
62.5°	163.1	161.9	163.1	161.9	161.9	160.6	160.6	159.4	156.9	154.4	149.2
65°	144.2	145.5	144.2	144.2	142.9	141.6	141.6	140.4	136.6	134.1	129.0
67.5°	124.0	122.8	122.8	122.8	121.4	121.4	121.4	118.9	116.4	112.6	107.5
70°	101.2	101.2	101.2	99.9	99.9	98.6	98.6	97.4	94.9	92.4	86.0
72.5°	79.8	79.8	79.8	77.1	78.4	77.1	77.1	74.6	73.4	69.6	65.8
75°	60.8	60.8	59.5	59.5	58.1	56.9	56.9	55.6	54.4	51.9	48.1
77.5°	44.2	44.2	44.2	43.0	41.8	40.5	40.5	39.2	38.0	36.6	34.1
80°	30.4	30.4	30.4	30.4	29.1	27.9	27.9	26.6	26.6	25.2	22.8
82.5°	20.2	20.2	20.2	20.2	19.0	19.0	19.0	17.8	16.5	16.5	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°	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2
2.5°	900.6	900.6	899.4	895.5	896.9	895.5	896.9	895.5	891.8	895.5	891.8
5°	905.6	906.9	904.4	899.4	900.6	899.4	899.4	898.1	894.2	896.9	894.2
7.5°	910.8	909.5	908.2	903.1	904.4	903.1	903.1	900.6	896.9	899.4	895.5
10°	913.2	913.2	910.8	905.6	905.6	904.4	905.6	904.4	899.4	903.1	900.6
12.5°	913.2	912.0	912.0	905.6	906.9	905.6	906.9	904.4	900.6	903.1	901.9
15°	909.5	909.5	908.2	901.9	903.1	903.1	904.4	901.9	898.1	901.9	899.4
17.5°	901.9	901.9	900.6	895.5	898.1	898.1	899.4	896.9	893.0	895.5	895.5
20°	886.8	888.0	888.0	884.1	886.8	886.8	888.0	886.8	885.4	886.8	884.1
22.5°	869.0	871.5	871.5	867.8	870.2	870.2	874.0	872.8	870.2	871.5	870.2
25°	842.4	845.0	847.5	845.0	847.5	847.5	851.2	850.0	847.5	850.0	846.2
27.5°	812.1	813.4	815.9	813.4	817.1	815.9	819.6	818.4	814.6	818.4	817.1
30°	769.0	774.1	777.9	774.1	777.9	777.9	780.5	779.1	777.9	776.6	776.6
32.5°	721.0	726.0	726.0	724.8	727.4	727.4	728.6	726.0	724.8	726.0	727.4
35°	661.5	664.1	666.6	665.4	666.6	667.9	666.6	667.9	664.1	665.4	665.4
37.5°	597.0	599.5	599.5	595.8	598.2	598.2	595.8	595.8	593.2	595.8	590.8
40°	528.8	526.2	527.5	524.9	522.4	522.4	521.1	516.1	513.5	514.9	516.1
42.5°	461.8	461.8	457.9	451.6	445.2	445.2	441.5	438.9	433.9	436.4	435.1
45°	404.8	398.5	393.4	383.2	379.5	377.0	370.6	364.2	361.8	363.0	361.8
47.5°	350.4	345.4	332.6	318.8	315.0	311.1	303.6	296.0	293.5	290.9	290.9
50°	304.9	296.0	282.1	266.9	260.6	254.2	244.1	236.5	231.5	232.8	232.8
52.5°	263.1	253.0	236.5	217.5	210.0	202.4	193.5	184.6	180.9	179.6	179.6
55°	226.4	215.0	198.6	177.1	170.8	161.9	150.5	140.4	135.4	134.1	136.6
57.5°	193.5	183.4	164.4	142.9	135.4	126.5	115.1	106.2	99.9	98.6	99.9
60°	167.0	153.0	136.6	116.4	106.2	98.6	86.0	78.4	72.1	69.6	70.9
62.5°	140.4	127.8	111.2	91.1	83.5	75.9	64.5	55.6	50.6	49.4	50.6
65°	120.1	107.5	92.4	74.6	67.0	59.5	49.4	40.5	36.6	35.4	36.6
67.5°	99.9	88.5	75.9	59.5	53.1	46.8	36.6	30.4	25.2	24.0	25.2
70°	81.0	70.9	58.1	46.8	40.5	35.4	27.9	21.5	17.8	16.5	17.8
72.5°	60.8	53.1	44.2	34.1	30.4	26.6	20.2	15.1	12.6	11.4	12.6
75°	44.2	38.0	31.6	24.0	21.5	19.0	13.9	10.1	8.9	7.6	8.9
77.5°	30.4	26.6	21.5	16.5	13.9	12.6	8.9	7.6	6.4	5.0	5.0
80°	20.2	17.8	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°	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2
2.5°	894.2	891.8	891.8	893.0	894.2	895.5	893.0	891.8	891.8	895.5	893.0
5°	894.2	893.0	893.0	893.0	895.5	896.9	894.2	893.0	894.2	898.1	896.9
7.5°	898.1	895.5	896.9	896.9	898.1	900.6	898.1	896.9	898.1	901.9	899.4
10°	900.6	898.1	899.4	898.1	901.9	903.1	900.6	899.4	900.6	905.6	904.4
12.5°	901.9	900.6	900.6	899.4	903.1	904.4	901.9	900.6	901.9	905.6	904.4
15°	899.4	898.1	898.1	898.1	900.6	903.1	899.4	898.1	898.1	901.9	900.6
17.5°	894.2	891.8	891.8	891.8	893.0	894.2	890.5	889.2	888.0	891.8	890.5
20°	885.4	882.9	880.4	880.4	881.6	881.6	879.1	875.2	875.2	876.6	874.0
22.5°	869.0	867.8	865.2	863.9	866.5	865.2	860.1	856.4	855.1	856.4	853.8
25°	846.2	843.6	842.4	841.1	842.4	841.1	836.1	831.0	831.0	831.0	827.2
27.5°	814.6	812.1	810.8	810.8	812.1	809.5	804.5	799.4	796.9	796.9	793.1
30°	774.1	774.1	772.9	771.6	770.4	770.4	762.8	757.6	755.1	756.4	753.9
32.5°	724.8	723.5	722.2	718.5	719.8	718.5	712.1	708.4	704.5	702.0	700.8
35°	661.5	661.5	660.2	660.2	660.2	659.0	652.6	648.9	646.4	645.1	641.2
37.5°	592.0	590.8	589.5	589.5	589.5	589.5	585.6	581.9	581.9	580.6	578.0
40°	513.5	514.9	516.1	514.9	518.6	522.4	517.4	514.9	513.5	517.4	512.2
42.5°	437.6	436.4	442.8	444.0	444.0	450.2	451.6	452.9	451.6	454.1	454.1
45°	364.2	363.0	369.4	371.9	378.2	385.8	389.6	395.9	398.5	401.0	398.5
47.5°	294.8	299.8	304.9	311.1	316.2	328.9	336.5	342.8	345.4	349.1	349.1
50°	236.5	241.6	250.5	255.5	261.9	277.0	289.6	298.5	303.6	307.4	306.1
52.5°	182.1	191.0	202.4	207.5	216.2	234.0	247.9	258.0	264.4	268.1	269.4
55°	140.4	148.0	159.4	167.0	175.9	194.8	212.5	223.9	230.2	235.2	237.8
57.5°	103.8	112.6	125.2	131.5	141.6	163.1	178.4	192.2	199.9	206.1	207.5
60°	75.9	84.8	96.1	103.8	113.9	135.4	153.0	165.8	174.5	179.6	182.1
62.5°	54.4	63.2	74.6	82.2	91.1	110.0	127.8	140.4	149.2	155.6	159.4
65°	39.2	48.1	59.5	65.8	73.4	91.1	107.5	120.1	129.0	136.6	139.1
67.5°	29.1	35.4	45.5	51.9	59.5	73.4	87.2	98.6	107.5	113.9	116.4
70°	21.5	26.6	35.4	39.2	44.2	56.9	68.2	78.4	86.0	91.1	93.6
72.5°	15.1	19.0	25.2	29.1	32.9	43.0	51.9	59.5	64.5	69.6	72.1
75°	10.1	12.6	17.8	20.2	22.8	30.4	36.6	43.0	46.8	50.6	51.9
77.5°	6.4	8.9	12.6	13.9	16.5	20.2	25.2	29.1	31.6	34.1	36.6
80°	3.8	5.0	7.6	8.9	10.1	13.9	16.5	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	16.5
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





TEST NUMBER: P252686

CATALOG NUMBER: LE\_6B20D010 EC6B10209730 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	894.2	894.2	894.2	894.2	894.2	894.2	894.2	894.2
2.5°	890.5	894.2	890.5	893.0	891.8	891.8	890.5	891.8
5°	894.2	899.4	894.2	898.1	895.5	895.5	895.5	896.9
7.5°	898.1	903.1	899.4	903.1	901.9	900.6	900.6	903.1
10°	901.9	905.6	903.1	906.9	905.6	904.4	904.4	906.9
12.5°	901.9	906.9	904.4	908.2	906.9	905.6	905.6	906.9
15°	898.1	904.4	900.6	904.4	903.1	901.9	901.9	904.4
17.5°	886.8	891.8	889.2	891.8	891.8	890.5	891.8	893.0
20°	871.5	875.2	872.8	875.2	875.2	872.8	874.0	875.2
22.5°	850.0	853.8	851.2	853.8	852.5	851.2	851.2	850.0
25°	823.5	828.5	824.8	827.2	824.8	822.1	822.1	823.5
27.5°	790.5	794.4	789.2	791.9	789.2	786.8	786.8	785.5
30°	747.5	748.9	745.0	747.5	745.0	743.8	741.2	741.2
32.5°	695.8	697.0	693.1	693.1	690.6	690.6	685.6	689.4
35°	635.0	636.2	635.0	633.8	629.9	628.6	627.4	627.4
37.5°	571.8	571.8	568.0	566.6	564.1	561.6	562.9	559.1
40°	507.2	506.0	502.1	503.4	502.1	498.4	497.1	495.9
42.5°	446.5	446.5	442.8	444.0	441.5	440.1	436.4	437.6
45°	393.4	393.4	389.6	389.6	388.4	384.5	385.8	383.2
47.5°	345.4	345.4	344.0	344.0	340.2	339.0	339.0	339.0
50°	303.6	303.6	303.6	303.6	302.2	301.0	299.8	301.0
52.5°	268.1	270.8	269.4	269.4	268.1	266.9	265.6	265.6
55°	236.5	237.8	237.8	239.1	237.8	236.5	237.8	236.5
57.5°	208.8	211.2	211.2	211.2	211.2	211.2	210.0	208.8
60°	184.6	186.0	186.0	187.2	187.2	187.2	186.0	186.0
62.5°	160.6	163.1	164.4	164.4	165.8	164.4	164.4	164.4
65°	141.6	144.2	145.5	144.2	145.5	145.5	144.2	144.2
67.5°	118.9	121.4	121.4	121.4	121.4	122.8	121.4	121.4
70°	96.1	98.6	97.4	98.6	98.6	98.6	98.6	98.6
72.5°	73.4	74.6	75.9	75.9	77.1	75.9	75.9	75.9
75°	53.1	55.6	55.6	55.6	55.6	56.9	56.9	56.9
77.5°	38.0	39.2	39.2	40.5	40.5	40.5	40.5	41.8
80°	26.6	26.6	27.9	27.9	29.1	29.1	29.1	29.1
82.5°	17.8	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)