

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P857236

Luminaire Tested: **LX4C20D010 EX4C209827 4LBSWNH**

Issue Date: 2/18/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P857236  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251634)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/18/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LX4C20D010 EX4C209827 4LBSWNH  
Description:  
Light Source: -  
Ballast/Driver: -

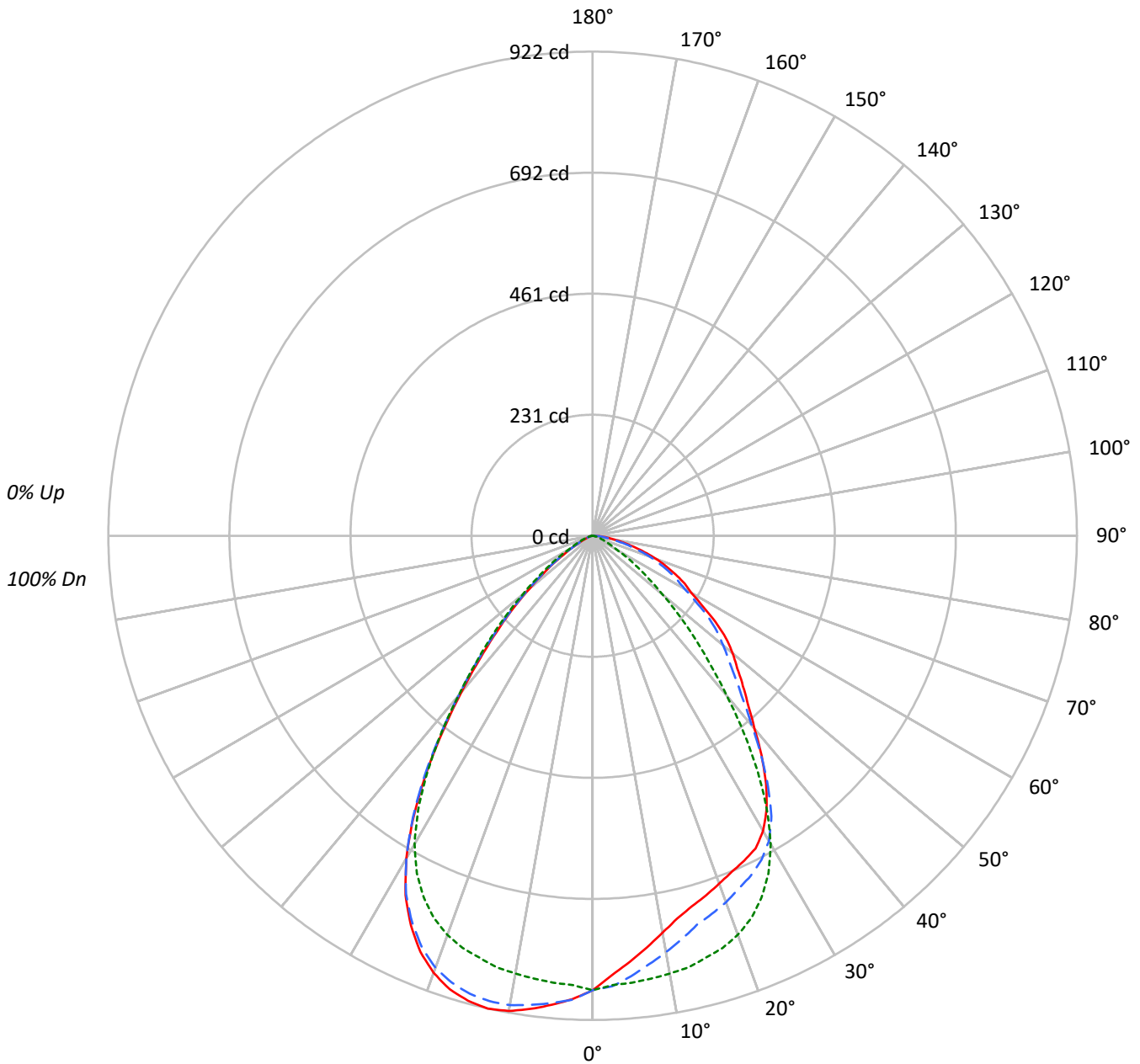
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1516.8 lumens  
Efficiency: N/A  
Efficacy: 69.6 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.8  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P857236

CATALOG NUMBER: LX4C20D010 EX4C209827 4LBSWNH

### Luminous Intensity Polar Plot





TEST NUMBER: P857236

CATALOG NUMBER: LX4C20D010 EX4C209827 4LBSWNH

**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			100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			79
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70			70
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62			62
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56			56
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50			50
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46			46
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42			42
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38			38
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35			35

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	106305	106305	106305
5°	100385	105342	110571
10°	95707	105587	114632
15°	92898	105807	116580
20°	92131	105702	115755
25°	92515	103089	110937
30°	92066	96180	100606
35°	86296	82112	82952
40°	76899	63668	62241
45°	70330	47466	44565
50°	66493	33256	30045
55°	61129	22447	18870
60°	53417	13145	10418
65°	50581	8430	5843
70°	46049	6035	3628
75°	38116	4225	2658
80°	29997	2405	1556
85°	26782	1692	0



TEST NUMBER: P857236

CATALOG NUMBER: LX4C20D010 EX4C209827 4LBSWNH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.8	5.4
10°-20°	234.6	15.5
20°-30°	347.7	22.9
30°-40°	348.2	23.0
40°-50°	243.3	16.0
50°-60°	144.8	9.5
60°-70°	75.6	5.0
70°-80°	33.6	2.2
80°-90°	7.3	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°	664.0	43.8
0°-40°	1012.2	66.7
0°-60°	1400.3	92.3
0°-90°	1516.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1516.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	865	865	865	865	865	
5°	814	842	854	893	897	76
15°	730	767	832	903	917	207
25°	682	714	760	813	818	314
35°	575	582	548	558	553	357
45°	405	385	273	264	256	314
55°	285	268	105	91	88	253
65°	174	159	29	21	20	172
75°	80	70	9	6	6	87
85°	19	14	1	1	0	21
90°	0	0	0	0	0	



TEST NUMBER: P857236

CATALOG NUMBER: LX4C20D010 EX4C209827 4LBSWNH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3
2.5°	837.4	847.5	837.4	840.8	854.2	841.9	848.6	848.6	845.3	853.0	858.7
5°	814.0	824.1	814.0	818.4	833.0	820.7	828.5	826.3	827.4	834.1	841.9
7.5°	790.6	798.4	789.5	795.1	808.5	798.4	805.1	805.1	806.2	816.2	823.0
10°	767.2	773.9	767.2	771.6	786.2	777.2	781.7	782.8	786.2	795.1	805.1
12.5°	746.0	751.6	744.9	751.6	763.9	754.9	760.5	761.6	764.9	775.0	786.2
15°	730.4	736.0	729.3	734.9	746.0	739.3	743.8	746.0	748.3	757.2	767.2
17.5°	718.1	722.6	717.0	723.7	732.7	724.8	731.5	731.5	734.9	743.8	754.9
20°	704.7	709.2	704.7	710.4	720.3	713.7	719.3	719.3	722.6	732.7	742.6
22.5°	692.5	694.8	692.5	697.0	707.0	701.4	704.7	705.9	709.2	718.1	727.0
25°	682.5	686.9	684.7	689.1	695.8	690.3	693.6	694.8	698.1	705.9	713.7
27.5°	671.3	673.5	671.3	676.9	682.5	678.0	681.4	680.2	682.5	689.1	695.8
30°	649.0	651.2	651.2	654.5	659.1	656.9	660.2	656.9	659.1	664.6	671.3
32.5°	616.6	617.8	618.9	622.3	625.6	622.3	624.5	624.5	624.5	628.9	633.4
35°	575.4	577.6	576.5	578.7	582.0	581.0	581.0	579.8	577.6	579.8	582.0
37.5°	528.5	525.2	525.2	528.5	530.8	526.3	528.5	526.3	526.3	527.5	527.5
40°	479.5	476.2	479.5	480.6	481.7	479.5	478.4	476.2	472.8	474.0	471.7
42.5°	438.3	436.0	437.1	437.1	438.3	436.0	437.1	432.7	429.3	427.1	423.8
45°	404.8	401.5	404.8	402.5	402.5	401.5	400.3	398.1	393.6	390.3	384.7
47.5°	373.6	373.6	374.6	374.6	374.6	372.4	372.4	367.9	363.5	359.0	351.3
50°	347.9	345.6	350.1	350.1	346.8	345.6	346.8	341.2	337.9	332.3	324.5
52.5°	320.0	320.0	321.1	321.1	320.0	317.8	318.9	314.4	311.1	305.5	297.8
55°	285.4	283.2	286.6	286.6	285.4	284.4	285.4	282.1	278.8	274.3	267.6
57.5°	246.5	245.3	247.5	248.7	246.5	246.5	247.5	244.2	243.1	238.6	231.9
60°	217.4	216.3	218.6	219.7	217.4	217.4	217.4	212.9	210.7	206.3	201.8
62.5°	197.3	196.3	198.5	197.3	196.3	195.1	196.3	191.8	189.6	185.1	180.7
65°	174.0	175.0	176.2	176.2	175.0	174.0	174.0	171.7	169.5	165.1	159.4
67.5°	151.6	151.6	152.8	153.8	152.8	152.8	152.8	149.4	147.1	143.8	137.1
70°	128.2	127.1	130.5	130.5	128.2	129.3	128.2	127.1	124.8	120.4	114.9
72.5°	103.7	103.7	104.8	104.8	103.7	103.7	103.7	102.6	99.3	97.0	91.4
75°	80.3	80.3	81.4	82.5	80.3	80.3	81.4	79.2	77.0	73.6	70.3
77.5°	60.2	59.1	60.2	60.2	59.1	59.1	59.1	58.0	56.9	53.5	50.2
80°	42.4	41.3	42.4	42.4	42.4	41.3	41.3	40.1	40.1	37.9	34.6
82.5°	29.0	27.9	29.0	29.0	29.0	27.9	27.9	27.9	26.8	25.7	23.5
85°	19.0	17.8	17.8	19.0	17.8	17.8	17.8	17.8	16.8	15.6	14.5
87.5°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	7.8	7.8	7.8	6.7
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: P857236

CATALOG NUMBER: LX4C20D010 EX4C209827 4LBSWNH

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3
2.5°	854.2	852.0	858.7	856.4	857.5	852.0	860.9	856.4	862.0	856.4	867.6
5°	839.7	837.4	847.5	846.4	847.5	843.1	853.0	852.0	858.7	854.2	866.4
7.5°	824.1	821.8	833.0	834.1	836.4	831.9	845.3	845.3	852.0	850.8	864.2
10°	806.2	807.3	818.4	820.7	825.2	823.0	835.2	838.6	847.5	846.4	863.1
12.5°	789.5	789.5	804.0	808.5	811.8	810.7	825.2	829.7	839.7	841.9	857.5
15°	772.8	773.9	787.2	793.9	798.4	797.3	812.9	818.4	830.7	831.9	850.8
17.5°	759.4	758.2	772.8	778.3	785.0	783.9	800.6	807.3	819.6	823.0	840.8
20°	748.3	747.1	760.5	767.2	771.6	770.6	787.2	795.1	806.2	808.5	826.3
22.5°	734.9	732.7	746.0	751.6	756.0	754.9	769.4	775.0	786.2	788.4	805.1
25°	719.3	717.0	729.3	732.7	736.0	733.7	746.0	749.3	758.2	760.5	777.2
27.5°	701.4	695.8	705.9	705.9	708.1	704.7	713.7	717.0	724.8	724.8	740.4
30°	673.5	665.8	671.3	670.2	671.3	666.8	672.5	673.5	679.2	678.0	689.1
32.5°	634.5	623.3	626.7	623.3	620.0	613.3	620.0	617.8	622.3	617.8	627.8
35°	581.0	569.8	568.7	564.2	560.9	555.3	555.3	549.8	550.8	547.5	554.2
37.5°	523.0	508.5	506.2	497.3	491.8	485.1	485.1	480.6	475.0	472.8	478.4
40°	466.1	450.5	445.0	430.4	424.8	418.1	413.7	408.2	405.9	397.0	401.5
42.5°	417.1	400.3	388.1	372.4	366.9	356.8	350.1	343.4	340.1	330.0	334.5
45°	375.8	355.7	342.3	322.3	314.4	303.3	293.3	285.4	277.7	273.2	271.0
47.5°	341.2	320.0	302.2	279.9	267.6	257.6	244.2	236.4	226.4	220.8	217.4
50°	312.2	288.8	268.8	243.1	230.9	219.7	204.0	191.8	182.9	174.0	171.7
52.5°	286.6	262.1	239.8	210.7	196.3	182.9	166.1	152.8	144.9	134.9	133.8
55°	256.5	235.3	210.7	180.7	166.1	152.8	134.9	121.5	111.5	104.8	102.6
57.5°	224.2	204.0	180.7	150.5	136.0	121.5	104.8	92.6	83.6	78.0	77.0
60°	194.0	175.0	152.8	122.6	108.2	95.9	78.0	65.8	58.0	53.5	51.3
62.5°	171.7	153.8	132.7	104.8	91.4	79.2	62.4	51.3	44.6	40.1	37.9
65°	150.5	132.7	113.7	88.1	77.0	65.8	50.2	40.1	33.4	29.0	26.8
67.5°	128.2	112.6	94.8	73.6	62.4	53.5	40.1	31.2	25.7	22.3	20.1
70°	105.9	91.4	77.0	59.1	51.3	42.4	31.2	24.5	19.0	16.8	14.5
72.5°	83.6	72.5	60.2	45.7	39.1	33.4	24.5	17.8	14.5	12.3	10.1
75°	62.4	54.7	44.6	34.6	29.0	24.5	17.8	13.4	11.1	8.9	7.8
77.5°	44.6	37.9	31.2	23.5	21.2	17.8	12.3	10.1	7.8	5.6	4.5
80°	30.1	26.8	21.2	16.8	13.4	12.3	8.9	6.7	4.5	3.4	3.4
82.5°	20.1	16.8	13.4	10.1	8.9	7.8	5.6	4.5	3.4	2.2	2.2
85°	12.3	10.1	7.8	5.6	5.6	4.5	3.4	2.2	1.2	1.2	1.2
87.5°	5.6	4.5	3.4	2.2	2.2	1.2	1.2	1.2	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



TEST NUMBER: P857236

CATALOG NUMBER: LX4C20D010 EX4C209827 4LBSWNH

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3
2.5°	876.5	869.8	865.3	870.9	873.1	869.8	873.1	878.7	884.3	885.4	869.8
5°	877.7	870.9	868.6	875.3	876.5	875.3	878.7	886.6	893.3	895.5	879.9
7.5°	877.7	873.1	872.0	879.9	881.0	879.9	885.4	894.3	901.0	905.5	889.9
10°	875.3	873.1	874.3	881.0	883.2	883.2	891.0	901.0	907.7	912.2	896.6
12.5°	872.0	872.0	872.0	879.9	882.1	883.2	889.9	903.2	907.7	914.4	898.8
15°	866.4	866.4	866.4	874.3	877.7	877.7	885.4	897.7	903.2	909.9	894.3
17.5°	856.4	856.4	857.5	864.2	867.6	867.6	875.3	888.8	892.1	899.9	884.3
20°	841.9	841.9	843.1	849.7	853.0	850.8	860.9	872.0	875.3	882.1	866.4
22.5°	820.7	820.7	820.7	827.4	829.7	828.5	838.6	848.6	848.6	857.5	840.8
25°	789.5	791.7	789.5	796.1	798.4	797.3	806.2	815.1	812.9	823.0	806.2
27.5°	751.6	750.5	750.5	756.0	756.0	754.9	761.6	771.6	769.4	776.1	760.5
30°	699.2	702.5	697.0	704.7	701.4	699.2	703.7	712.6	709.2	714.8	702.5
32.5°	638.9	634.5	634.5	634.5	636.7	631.2	635.6	640.1	636.7	642.3	628.9
35°	559.7	560.9	557.5	558.7	559.7	553.1	557.5	562.0	557.5	560.9	548.6
37.5°	480.6	481.7	474.0	478.4	474.0	471.7	476.2	478.4	474.0	477.3	463.9
40°	401.5	399.2	398.1	398.1	399.2	393.6	397.0	400.3	397.0	399.2	386.9
42.5°	332.3	331.2	329.0	330.0	326.7	325.6	326.7	330.0	326.7	329.0	320.0
45°	272.1	269.8	266.5	267.6	267.6	262.1	265.4	267.6	264.3	265.4	257.6
47.5°	216.3	212.9	212.9	211.9	211.9	209.6	212.9	211.9	208.5	210.7	203.0
50°	168.4	166.1	166.1	166.1	166.1	162.7	163.9	166.1	162.7	162.7	158.3
52.5°	131.5	128.2	126.0	126.0	126.0	124.8	124.8	126.0	122.6	122.6	121.5
55°	99.3	98.1	94.8	94.8	94.8	91.4	92.6	92.6	91.4	91.4	88.1
57.5°	73.6	70.3	68.0	68.0	65.8	65.8	64.7	65.8	63.6	63.6	61.4
60°	49.0	46.8	45.7	44.6	44.6	43.5	44.6	43.5	43.5	42.4	41.3
62.5°	35.7	33.4	31.2	31.2	31.2	30.1	30.1	30.1	30.1	30.1	29.0
65°	25.7	23.5	23.5	22.3	22.3	21.2	21.2	21.2	21.2	21.2	20.1
67.5°	17.8	16.8	15.6	15.6	15.6	15.6	15.6	15.6	14.5	14.5	14.5
70°	13.4	12.3	11.1	11.1	11.1	11.1	11.1	10.1	11.1	11.1	10.1
72.5°	8.9	8.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
75°	6.7	6.7	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
77.5°	4.5	4.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
80°	3.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
82.5°	2.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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





TEST NUMBER: P857236

CATALOG NUMBER: LX4C20D010 EX4C209827 4LBSWNH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	865.3	865.3	865.3	865.3	865.3	865.3	865.3	865.3
2.5°	886.6	885.4	883.2	886.6	877.7	874.3	873.1	883.2
5°	898.8	896.6	896.6	899.9	889.9	887.6	885.4	896.6
7.5°	909.9	907.7	907.7	911.1	902.2	899.9	897.7	908.9
10°	916.6	916.6	916.6	918.9	911.1	908.9	907.7	918.9
12.5°	920.0	920.0	918.9	923.3	913.3	913.3	911.1	922.2
15°	915.6	915.6	915.6	918.9	909.9	907.7	907.7	916.6
17.5°	904.4	904.4	903.2	906.6	896.6	896.6	895.5	905.5
20°	887.6	887.6	885.4	889.9	879.9	876.5	875.3	885.4
22.5°	860.9	859.7	858.7	860.9	852.0	849.7	848.6	857.5
25°	826.3	825.2	823.0	825.2	815.1	811.8	811.8	818.4
27.5°	777.2	777.2	773.9	777.2	766.1	764.9	763.9	771.6
30°	717.0	712.6	710.4	714.8	703.7	703.7	701.4	709.2
32.5°	642.3	637.9	636.7	638.9	628.9	625.6	630.0	634.5
35°	556.4	557.5	553.1	553.1	544.1	545.3	546.4	553.1
37.5°	474.0	471.7	470.6	471.7	465.0	462.8	460.6	467.3
40°	397.0	391.4	390.3	390.3	384.7	383.6	384.7	388.1
42.5°	324.5	323.3	318.9	321.1	315.6	317.8	316.7	316.7
45°	262.1	263.2	258.7	262.1	257.6	254.2	254.2	256.5
47.5°	207.4	207.4	206.3	206.3	203.0	204.0	201.8	205.2
50°	160.5	160.5	158.3	159.4	157.2	157.2	156.1	157.2
52.5°	122.6	121.5	121.5	120.4	118.2	119.3	120.4	118.2
55°	89.2	90.3	88.1	89.2	86.9	88.1	86.9	88.1
57.5°	61.4	62.4	60.2	62.4	60.2	61.4	60.2	60.2
60°	42.4	42.4	41.3	42.4	41.3	41.3	40.1	42.4
62.5°	29.0	29.0	29.0	29.0	29.0	27.9	29.0	29.0
65°	21.2	20.1	20.1	20.1	20.1	20.1	20.1	20.1
67.5°	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
70°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
72.5°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
75°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
80°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	0.0	1.2	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)