

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: P857291

Luminaire Tested: **LX4C20D010 EX4C209030 4LBLWW***

Issue Date: 2/9/2022

Test Information

Test Method: LM-79-08
Report Number: P857291
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C20D010 EX4C209030 4LBLWW*
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

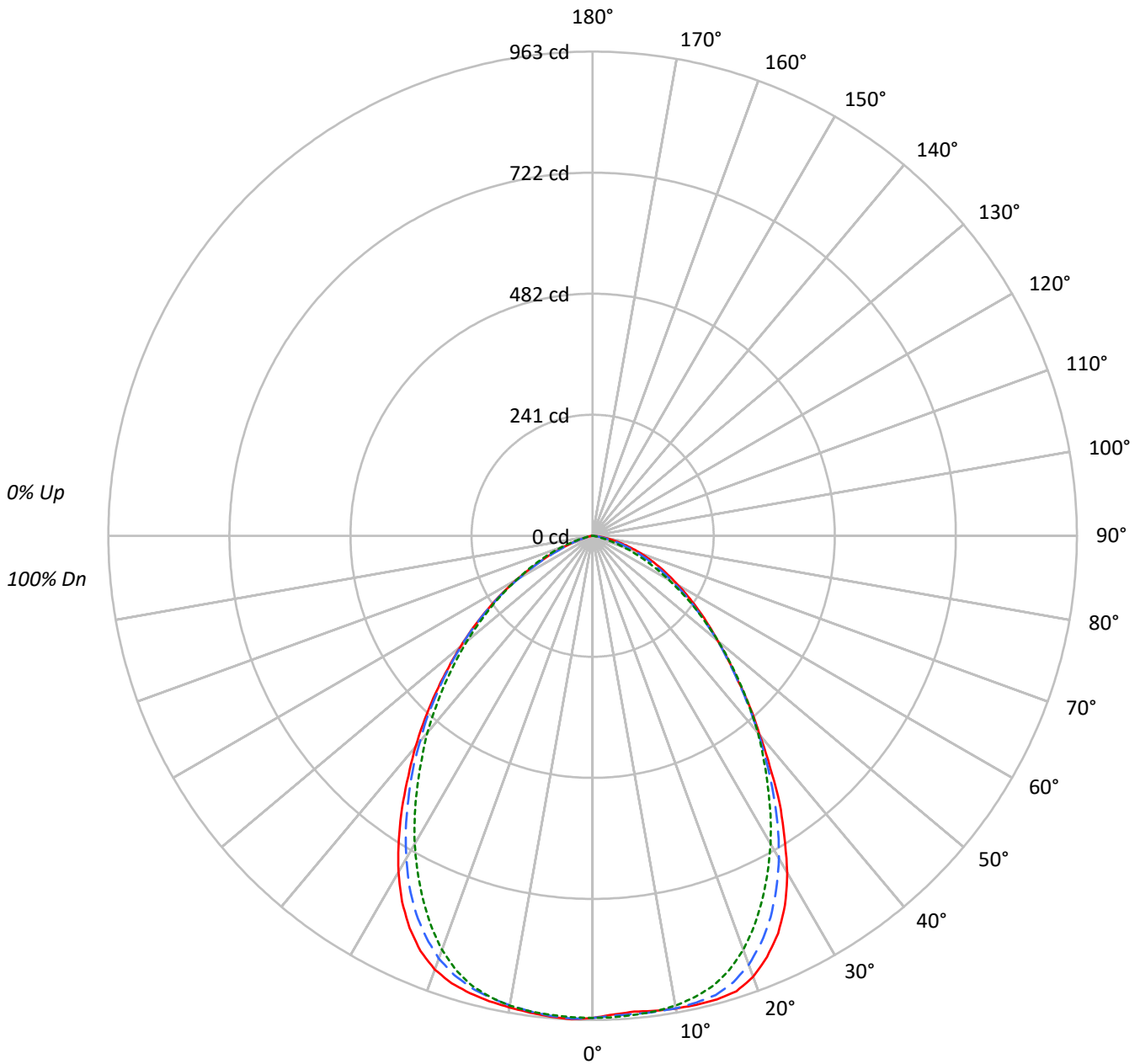
Lumens per Lamp: N/A
Luminaire Lumens: 1838.6 lumens
Efficiency: N/A
Efficacy: 56.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 32.6
Input Voltage (V):
Input Current (A_{in}): 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: P857291

CATALOG NUMBER: LX4C20D010 EX4C209030 4LBLWW*

Luminous Intensity Polar Plot





TEST NUMBER: P857291

CATALOG NUMBER: LX4C20D010 EX4C209030 4LBLWW*

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	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89			89
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78			78
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68			68
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60			60
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54			54
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48			48
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43			43
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39			39
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36			36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33			33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	117816	117816	117816
5°	117157	117958	118402
10°	119098	118374	118823
15°	121426	117852	119810
20°	122044	114540	120004
25°	118284	108185	116671
30°	109799	100379	109572
35°	97215	91051	99059
40°	82881	81999	87853
45°	71199	72016	76533
50°	62135	62307	65594
55°	54918	52605	54382
60°	48134	42925	42728
65°	42616	33285	29651
70°	36351	22881	17601
75°	29382	12341	8022
80°	20093	3042	2052
85°	6061	987	987



TEST NUMBER: P857291

CATALOG NUMBER: LX4C20D010 EX4C209030 4LBLWW*

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	5.0
10°-20°	263.8	14.4
20°-30°	381.2	20.7
30°-40°	394.1	21.4
40°-50°	325.7	17.7
50°-60°	224.8	12.2
60°-70°	117.7	6.4
70°-80°	37.0	2.0
80°-90°	3.1	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°	736.2	40.0
0°-40°	1130.3	61.5
0°-60°	1680.8	91.4
0°-90°	1838.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1838.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	959	959	959	959	959	
5°	950	955	956	958	960	91
15°	955	946	927	931	942	269
25°	873	837	798	830	861	398
35°	648	627	607	639	660	402
45°	410	408	414	434	440	319
55°	256	248	246	252	254	230
65°	147	133	114	95	102	145
75°	62	49	26	18	17	66
85°	4	2	1	1	1	9
90°	0	0	0	0	0	



TEST NUMBER: P857291

CATALOG NUMBER: LX4C20D010 EX4C209030 4LBLWW*

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0
2.5°	952.9	953.3	953.3	954.0	954.0	954.0	954.3	954.3	954.7	955.0	955.4
5°	950.0	950.0	950.7	951.1	951.8	952.1	952.9	953.3	954.0	954.3	954.7
7.5°	952.9	952.9	953.3	953.6	953.6	954.0	954.0	954.3	954.7	955.0	955.0
10°	954.7	954.7	954.7	954.7	955.0	955.0	955.0	954.7	954.7	954.7	954.3
12.5°	955.4	955.4	955.0	954.7	955.0	954.7	954.7	953.6	952.9	952.1	951.1
15°	954.7	954.7	954.3	954.0	953.6	952.9	952.5	950.7	949.3	947.1	945.6
17.5°	950.0	949.3	948.5	947.8	946.4	945.3	944.6	941.3	938.8	935.2	931.2
20°	933.5	932.8	931.6	929.9	928.0	926.6	924.4	919.8	917.2	911.9	907.8
22.5°	906.4	905.7	906.1	902.8	899.2	897.0	895.6	891.7	887.4	880.6	876.1
25°	872.6	870.5	870.5	865.4	863.6	862.1	860.4	855.6	849.1	843.1	837.3
27.5°	828.6	825.8	824.3	823.6	819.3	816.1	813.5	809.9	804.5	799.1	791.2
30°	774.0	773.6	771.7	768.5	765.3	763.9	761.0	754.8	749.8	745.8	740.8
32.5°	709.5	709.1	709.1	709.1	706.9	706.6	702.3	699.0	695.1	688.9	685.7
35°	648.2	647.9	648.2	642.9	641.4	640.3	640.0	637.8	632.4	629.5	626.6
37.5°	579.1	580.1	579.4	578.0	579.8	576.5	579.1	574.4	572.2	571.5	568.3
40°	516.8	519.7	516.8	517.1	519.0	515.7	515.7	514.9	513.5	512.8	512.1
42.5°	463.5	459.8	462.0	460.3	462.0	461.0	459.1	460.3	460.6	459.1	458.8
45°	409.8	410.5	411.2	410.2	410.2	409.1	412.0	410.2	410.2	410.5	408.0
47.5°	366.2	365.2	365.9	365.2	365.5	364.8	365.5	365.9	365.2	365.2	363.0
50°	325.1	324.5	327.0	324.8	324.8	324.5	324.8	324.1	323.1	323.1	323.8
52.5°	289.5	288.1	287.8	289.5	287.0	287.0	287.3	286.6	285.2	284.5	282.7
55°	256.4	256.0	256.4	255.0	254.3	254.3	252.4	251.7	251.4	249.5	248.5
57.5°	225.4	224.3	224.7	224.3	223.0	222.6	221.1	221.1	219.7	218.2	216.5
60°	195.9	195.9	197.0	195.6	194.4	193.7	193.0	192.3	189.8	187.2	185.1
62.5°	169.6	169.9	169.6	168.5	167.9	167.0	166.3	164.3	162.1	160.7	158.1
65°	146.6	146.2	145.1	144.4	142.6	142.6	141.2	140.1	137.6	135.4	132.9
67.5°	122.8	122.0	122.0	122.0	119.9	119.6	118.8	116.7	114.5	111.6	109.5
70°	101.2	102.0	100.8	99.8	98.7	98.4	97.2	95.1	92.6	89.7	87.9
72.5°	80.6	81.4	80.3	79.9	77.8	77.0	76.7	74.9	72.0	70.2	67.4
75°	61.9	62.3	61.6	60.9	59.4	59.0	57.3	55.8	54.1	51.2	48.6
77.5°	44.7	44.0	44.0	42.5	41.1	41.1	40.7	38.5	36.0	33.9	31.7
80°	28.4	28.1	27.0	26.3	25.2	24.8	24.5	22.7	20.9	19.5	18.0
82.5°	14.4	14.0	13.7	13.3	12.6	11.8	12.3	10.8	10.1	8.7	7.5
85°	4.3	4.6	4.6	4.3	3.9	3.9	3.9	3.6	2.9	2.6	2.2
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: P857291

CATALOG NUMBER: LX4C20D010 EX4C209030 4LBLWW*

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0
2.5°	955.7	956.1	956.5	956.9	956.9	957.2	957.6	957.9	958.3	958.3	958.6
5°	955.0	955.7	955.7	956.1	956.1	956.1	956.5	956.5	956.5	956.5	956.9
7.5°	955.4	955.4	955.4	955.0	955.0	954.7	954.7	954.7	954.0	954.0	954.0
10°	953.6	953.3	952.9	952.1	951.8	951.4	950.7	950.0	949.3	948.9	948.2
12.5°	950.0	948.5	947.1	945.6	944.9	944.6	943.2	942.0	941.0	939.9	939.3
15°	942.8	940.6	938.1	935.2	934.5	933.8	931.2	929.2	927.7	926.6	924.8
17.5°	928.3	924.1	921.2	916.9	915.1	914.3	910.4	908.3	905.7	905.0	903.5
20°	902.8	898.9	893.4	889.5	887.4	885.2	881.9	879.0	876.1	876.1	874.4
22.5°	870.8	865.7	858.9	853.9	853.5	849.1	846.3	843.1	841.9	839.8	839.8
25°	830.4	826.2	818.6	814.2	812.1	811.0	806.3	802.0	799.8	798.1	799.5
27.5°	785.8	779.3	773.6	768.2	766.3	764.2	759.9	758.1	754.1	753.8	753.4
30°	734.6	728.1	722.4	719.9	716.3	714.4	711.2	709.1	707.6	707.6	706.9
32.5°	681.0	675.2	672.3	667.0	665.1	662.6	660.5	658.3	659.0	658.3	658.6
35°	623.0	621.5	616.2	612.9	612.9	612.6	609.0	607.5	606.8	607.1	609.0
37.5°	567.9	563.6	560.0	557.8	559.6	557.5	557.1	557.1	559.2	557.8	560.7
40°	509.2	508.9	507.4	508.1	508.5	506.0	506.7	507.0	508.5	511.3	511.8
42.5°	458.1	457.7	457.7	457.7	457.0	455.5	457.0	459.5	459.1	461.3	463.1
45°	408.8	408.0	409.5	408.4	410.5	411.2	410.2	410.9	413.1	414.5	417.4
47.5°	363.8	363.8	364.1	364.8	362.6	364.5	365.2	366.6	367.7	368.4	369.8
50°	321.9	321.9	321.2	321.2	321.2	322.4	320.9	322.7	323.1	326.0	327.7
52.5°	283.4	281.6	282.7	282.0	280.5	279.8	280.5	281.0	283.0	283.7	285.9
55°	246.7	246.7	243.8	243.1	244.2	243.8	243.5	243.5	244.5	245.6	247.4
57.5°	214.3	212.2	210.0	209.6	208.6	208.9	208.9	208.6	207.8	208.1	208.6
60°	183.6	182.2	179.0	179.0	178.6	178.3	176.4	176.1	174.3	174.7	173.2
62.5°	155.6	154.9	150.6	149.1	149.1	148.0	146.2	145.8	143.4	143.4	141.9
65°	130.4	128.2	125.6	123.2	123.2	121.7	120.6	117.4	115.7	114.5	112.4
67.5°	107.3	104.1	101.5	99.4	97.9	97.6	95.1	92.9	90.0	88.3	85.0
70°	85.0	82.5	79.9	77.8	76.3	74.9	72.4	69.1	66.9	63.7	61.6
72.5°	64.1	61.9	59.7	57.0	55.1	54.1	51.5	48.6	45.0	42.8	40.0
75°	46.1	43.6	40.7	38.2	37.1	36.0	33.2	31.0	28.4	26.0	23.1
77.5°	29.9	27.0	24.8	21.9	21.6	20.9	18.0	15.9	14.0	12.6	10.8
80°	15.9	14.4	12.6	10.8	10.1	9.0	7.5	6.5	5.5	4.3	3.6
82.5°	6.8	5.8	4.6	3.9	3.6	3.2	2.6	2.2	1.9	1.9	1.4
85°	1.9	1.4	1.4	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.3	0.3	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: P857291

CATALOG NUMBER: LX4C20D010 EX4C209030 4LBLWW*

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0
2.5°	959.0	959.3	959.8	959.8	960.1	960.5	960.5	960.8	961.2	961.5	961.5
5°	957.2	957.2	957.2	957.6	957.6	957.6	957.6	958.3	958.3	958.6	959.0
7.5°	953.6	953.6	953.6	953.6	953.3	953.6	953.3	953.3	954.0	954.3	954.7
10°	947.8	947.5	947.5	947.1	947.1	947.1	947.5	947.8	948.2	948.5	949.7
12.5°	938.8	938.4	938.4	938.1	938.1	938.4	938.8	939.6	941.0	941.7	943.2
15°	924.4	924.1	924.4	924.8	925.6	926.6	927.7	928.8	930.9	932.8	934.5
17.5°	903.5	903.9	904.2	905.0	906.1	907.5	910.4	913.3	915.8	918.7	921.5
20°	874.8	876.1	876.5	879.0	879.7	883.0	886.2	890.5	894.6	898.2	902.1
22.5°	840.2	841.2	842.7	845.5	847.4	851.7	855.6	860.7	865.0	869.7	875.5
25°	800.9	801.3	805.6	805.6	809.9	813.5	818.1	823.6	830.1	836.2	840.2
27.5°	756.2	758.1	761.3	762.7	765.9	771.7	775.7	782.2	788.7	794.0	798.4
30°	709.5	710.8	716.3	717.0	719.5	724.5	730.0	736.1	741.1	747.3	751.2
32.5°	660.2	664.1	667.3	669.8	670.6	678.1	681.0	685.3	691.1	697.2	701.1
35°	612.2	614.0	618.7	620.1	622.3	626.6	632.4	636.0	638.8	642.9	647.5
37.5°	561.4	566.9	567.9	572.2	572.9	576.9	579.8	584.2	587.8	591.4	592.1
40°	514.2	516.1	520.0	521.1	521.8	527.2	530.8	531.9	533.7	537.0	541.3
42.5°	466.3	468.2	472.5	471.4	474.7	477.1	479.0	483.3	485.1	486.2	486.2
45°	419.2	419.9	422.8	424.2	426.1	427.5	430.7	432.9	433.6	436.9	437.9
47.5°	374.2	374.9	377.0	379.6	378.9	380.6	384.3	385.4	385.7	387.9	388.9
50°	329.9	331.6	334.5	333.8	336.1	337.1	340.3	341.0	341.0	341.4	341.7
52.5°	288.5	289.9	290.6	291.4	292.4	294.2	295.7	295.0	296.4	297.8	296.7
55°	247.4	248.5	250.3	251.0	251.0	251.4	250.7	253.9	252.4	252.1	252.4
57.5°	210.0	208.6	208.1	210.0	210.7	210.3	209.3	210.7	210.7	210.0	208.9
60°	173.5	172.5	172.1	172.5	171.1	169.9	170.8	169.9	168.2	167.5	167.9
62.5°	140.5	139.3	136.5	136.5	135.7	135.4	132.5	132.9	131.4	129.3	130.0
65°	109.9	107.0	105.6	105.2	102.7	100.5	99.8	97.2	95.1	94.7	95.1
67.5°	82.5	79.2	76.7	75.6	74.2	72.4	69.8	67.7	68.4	68.1	69.5
70°	57.3	55.1	52.5	50.8	51.5	49.3	47.9	47.9	48.3	48.6	49.3
72.5°	38.2	35.3	34.2	33.2	32.4	31.0	31.7	31.7	31.3	31.7	31.0
75°	21.6	20.2	19.1	18.7	18.0	18.0	18.0	18.0	17.6	17.3	17.3
77.5°	9.7	9.0	8.7	8.2	8.2	8.2	7.9	7.5	7.5	7.5	7.2
80°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
82.5°	1.4	1.4	1.9	1.9	1.9	1.4	1.9	1.9	1.4	1.4	1.9
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.0	0.3	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: P857291

CATALOG NUMBER: LX4C20D010 EX4C209030 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	959.0	959.0	959.0	959.0	959.0	959.0	959.0	959.0
2.5°	961.9	962.2	962.2	962.2	962.6	962.6	962.6	962.6
5°	959.3	959.8	959.8	959.8	960.1	960.1	960.1	960.1
7.5°	955.0	955.4	955.4	955.7	955.7	956.1	956.1	956.5
10°	950.0	950.7	951.1	951.4	951.8	952.1	952.1	952.5
12.5°	944.6	945.3	945.6	946.4	947.1	947.5	947.8	948.2
15°	936.7	938.1	938.8	939.3	940.6	941.3	941.7	942.0
17.5°	924.1	927.0	928.0	928.8	930.2	931.6	932.8	933.1
20°	906.1	909.3	910.7	912.6	914.7	916.5	917.2	917.9
22.5°	880.9	884.5	886.6	888.8	890.5	892.4	895.3	894.2
25°	844.8	851.0	853.5	854.6	858.5	860.7	862.1	860.7
27.5°	804.5	808.2	810.3	812.8	815.7	817.8	818.6	820.7
30°	755.9	762.0	761.7	764.2	767.8	769.9	770.7	772.4
32.5°	705.5	708.4	710.5	710.2	711.7	715.6	714.1	717.3
35°	651.8	652.2	655.7	655.4	658.3	658.3	658.3	660.5
37.5°	594.6	598.9	597.1	601.5	600.0	601.0	601.0	601.8
40°	542.3	543.8	543.8	545.2	546.4	545.2	545.9	547.8
42.5°	488.4	489.8	490.1	489.4	490.4	493.7	491.3	493.3
45°	437.9	438.9	440.5	439.4	441.1	440.1	441.1	440.5
47.5°	390.3	390.0	389.6	392.5	390.0	390.3	391.8	389.3
50°	341.7	343.9	342.4	343.6	344.3	344.3	343.2	343.2
52.5°	298.6	298.2	297.1	298.2	297.4	297.8	298.6	297.8
55°	253.9	255.3	254.6	254.3	254.6	254.6	256.8	253.9
57.5°	210.0	209.3	210.3	212.9	210.3	212.2	213.2	213.6
60°	168.2	168.2	170.3	169.2	171.4	173.2	174.7	173.9
62.5°	128.2	130.0	130.7	131.1	133.3	134.7	134.7	134.3
65°	95.1	97.6	97.6	99.1	99.8	99.8	100.5	102.0
67.5°	70.2	70.2	70.5	71.3	71.0	71.0	71.7	72.0
70°	49.0	48.3	49.3	49.0	49.0	48.6	49.0	49.0
72.5°	31.0	31.0	31.3	31.0	30.3	30.6	30.6	31.3
75°	16.6	17.3	16.6	16.6	16.9	16.2	16.6	16.9
77.5°	6.8	6.8	6.8	6.8	6.8	6.5	6.5	6.5
80°	3.2	3.2	3.2	3.2	3.2	3.2	2.9	2.9
82.5°	1.4	1.9	1.4	1.9	1.4	1.4	1.4	1.4
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.3
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)