

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: P856918

Luminaire Tested: **LX4C15D010 EX4C159027 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P856918
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: LX4C15D010 EX4C159027 4LBSWNH
Description: 4 INCH 1500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

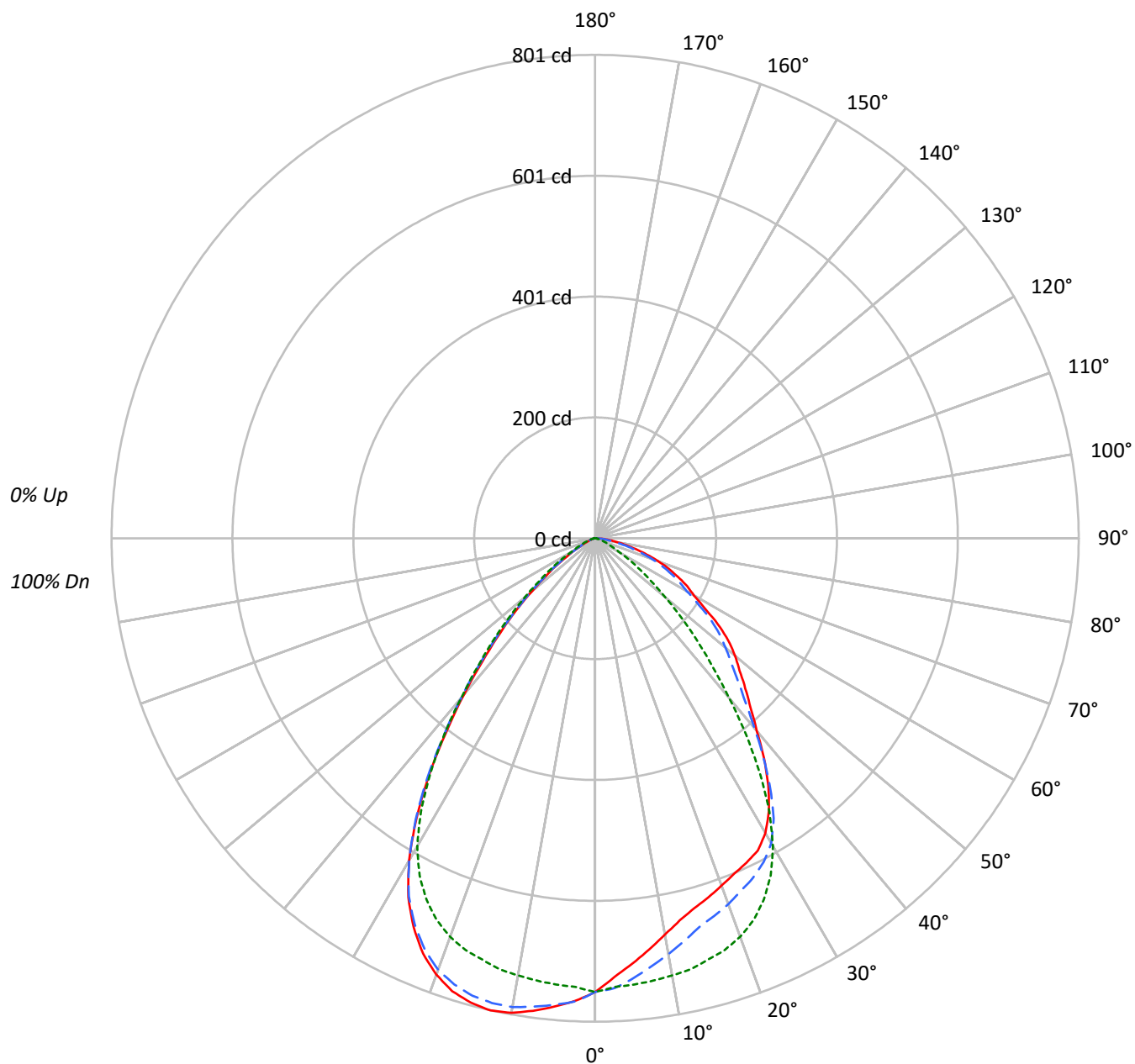
Lumens per Lamp: N/A
Luminaire Lumens: 1318.0 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 15.8
Input Voltage (V):
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

TEST NUMBER: P856918

CATALOG NUMBER: LX4C15D010 EX4C159027 4LBSWNH

Luminous Intensity Polar Plot





TEST NUMBER: P856918

CATALOG NUMBER: LX4C15D010 EX4C159027 4LBSWNH

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89		
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79		
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70		
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62		
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56		
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50		
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46		
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42		
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38		
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	92374	92374	92374
5°	87226	91530	96068
10°	83157	91740	99599
15°	80713	91931	101305
20°	80064	91843	100577
25°	80383	89574	96406
30°	79994	83569	87413
35°	74988	71359	72079
40°	66812	55329	54078
45°	61105	41246	38710
50°	57777	28898	26108
55°	53140	19513	16385
60°	46414	11425	9042
65°	43953	7326	5058
70°	40015	5208	3125
75°	33132	3655	2326
80°	26035	2052	1344
85°	23258	1410	0



TEST NUMBER: P856918

CATALOG NUMBER: LX4C15D010 EX4C159027 4LBSWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	5.4
10°-20°	203.8	15.5
20°-30°	302.1	22.9
30°-40°	302.5	23.0
40°-50°	211.4	16.0
50°-60°	125.8	9.5
60°-70°	65.7	5.0
70°-80°	29.2	2.2
80°-90°	6.4	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°	577.0	43.8
0°-40°	879.5	66.7
0°-60°	1216.8	92.3
0°-90°	1318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1318.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	752	752	752	752	752	
5°	707	732	742	776	779	66
15°	635	667	723	785	796	180
25°	593	620	661	706	711	273
35°	500	506	476	484	481	310
45°	352	334	237	230	223	273
55°	248	232	91	80	76	220
65°	151	139	25	18	17	150
75°	70	61	8	5	5	75
85°	16	13	1	1	0	18
90°	0	0	0	0	0	



TEST NUMBER: P856918

CATALOG NUMBER: LX4C15D010 EX4C159027 4LBSWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9
2.5°	727.7	736.4	727.7	730.6	742.2	731.5	737.4	737.4	734.5	741.2	746.1
5°	707.3	716.0	707.3	711.2	723.8	713.1	719.9	718.0	719.0	724.8	731.5
7.5°	687.0	693.7	686.0	690.9	702.5	693.7	699.6	699.6	700.5	709.2	715.1
10°	666.6	672.4	666.6	670.5	683.1	675.4	679.2	680.2	683.1	690.9	699.6
12.5°	648.2	653.1	647.3	653.1	663.7	656.0	660.8	661.8	664.7	673.4	683.1
15°	634.6	639.5	633.7	638.5	648.2	642.4	646.3	648.2	650.1	657.9	666.6
17.5°	624.0	627.9	623.0	628.8	636.6	629.8	635.6	635.6	638.5	646.3	656.0
20°	612.4	616.2	612.4	617.2	625.9	620.1	625.0	625.0	627.9	636.6	645.3
22.5°	601.7	603.7	601.7	605.6	614.3	609.5	612.4	613.3	616.2	624.0	631.8
25°	593.0	596.9	594.9	598.8	604.6	599.8	602.7	603.7	606.5	613.3	620.1
27.5°	583.3	585.2	583.3	588.2	593.0	589.1	592.0	591.0	593.0	598.8	604.6
30°	563.9	565.9	565.9	568.7	572.7	570.7	573.6	570.7	572.7	577.5	583.3
32.5°	535.8	536.8	537.8	540.7	543.6	540.7	542.6	542.6	542.6	546.5	550.4
35°	500.0	501.9	500.9	502.9	505.8	504.8	504.8	503.8	501.9	503.8	505.8
37.5°	459.3	456.4	456.4	459.3	461.2	457.3	459.3	457.3	457.3	458.3	458.3
40°	416.6	413.7	416.6	417.6	418.6	416.6	415.7	413.7	410.8	411.8	409.9
42.5°	380.8	378.8	379.8	379.8	380.8	378.8	379.8	375.9	373.0	371.1	368.2
45°	351.7	348.8	351.7	349.8	349.8	348.8	347.8	345.9	342.0	339.1	334.3
47.5°	324.6	324.6	325.5	325.5	325.5	323.6	323.6	319.7	315.9	312.0	305.2
50°	302.3	300.4	304.2	304.2	301.4	300.4	301.4	296.5	293.6	288.7	281.9
52.5°	278.1	278.1	279.1	279.1	278.1	276.1	277.1	273.2	270.3	265.5	258.7
55°	248.1	246.1	249.0	249.0	248.1	247.1	248.1	245.1	242.3	238.4	232.5
57.5°	214.1	213.2	215.1	216.1	214.1	214.1	215.1	212.2	211.2	207.3	201.5
60°	188.9	188.0	189.9	190.9	188.9	188.9	188.9	185.1	183.1	179.2	175.4
62.5°	171.5	170.5	172.5	171.5	170.5	169.6	170.5	166.7	164.7	160.9	157.0
65°	151.2	152.1	153.1	153.1	152.1	151.2	151.2	149.2	147.3	143.4	138.6
67.5°	131.8	131.8	132.7	133.7	132.7	132.7	132.7	129.8	127.9	125.0	119.2
70°	111.4	110.5	113.4	113.4	111.4	112.4	111.4	110.5	108.5	104.6	99.8
72.5°	90.1	90.1	91.1	91.1	90.1	90.1	90.1	89.1	86.2	84.3	79.5
75°	69.8	69.8	70.7	71.7	69.8	69.8	70.7	68.8	66.8	64.0	61.0
77.5°	52.3	51.4	52.3	52.3	51.4	51.4	51.4	50.4	49.4	46.5	43.6
80°	36.8	35.9	36.8	36.8	36.8	35.9	35.9	34.9	34.9	32.9	30.0
82.5°	25.2	24.2	25.2	25.2	25.2	24.2	24.2	24.2	23.2	22.3	20.4
85°	16.5	15.5	15.5	16.5	15.5	15.5	15.5	15.5	14.5	13.6	12.6
87.5°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.8	6.8	6.8	5.8
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: P856918

CATALOG NUMBER: LX4C15D010 EX4C159027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9
2.5°	742.2	740.3	746.1	744.2	745.1	740.3	748.0	744.2	749.0	744.2	753.8
5°	729.6	727.7	736.4	735.4	736.4	732.5	741.2	740.3	746.1	742.2	752.8
7.5°	716.0	714.1	723.8	724.8	726.7	722.8	734.5	734.5	740.3	739.3	750.9
10°	700.5	701.5	711.2	713.1	717.0	715.1	725.7	728.7	736.4	735.4	750.0
12.5°	686.0	686.0	698.6	702.5	705.4	704.4	717.0	720.9	729.6	731.5	745.1
15°	671.5	672.4	684.1	689.9	693.7	692.8	706.4	711.2	721.9	722.8	739.3
17.5°	659.8	658.9	671.5	676.3	682.1	681.2	695.7	701.5	712.2	715.1	730.6
20°	650.1	649.2	660.8	666.6	670.5	669.6	684.1	690.9	700.5	702.5	718.0
22.5°	638.5	636.6	648.2	653.1	656.9	656.0	668.6	673.4	683.1	685.1	699.6
25°	625.0	623.0	633.7	636.6	639.5	637.6	648.2	651.1	658.9	660.8	675.4
27.5°	609.5	604.6	613.3	613.3	615.3	612.4	620.1	623.0	629.8	629.8	643.4
30°	585.2	578.5	583.3	582.3	583.3	579.4	584.3	585.2	590.1	589.1	598.8
32.5°	551.3	541.6	544.6	541.6	538.7	532.9	538.7	536.8	540.7	536.8	545.5
35°	504.8	495.1	494.2	490.3	487.4	482.5	482.5	477.7	478.7	475.8	481.6
37.5°	454.4	441.8	439.9	432.2	427.3	421.5	421.5	417.6	412.8	410.8	415.7
40°	405.0	391.4	386.6	374.0	369.2	363.3	359.5	354.6	352.7	345.0	348.8
42.5°	362.4	347.8	337.2	323.6	318.8	310.1	304.2	298.4	295.5	286.8	290.7
45°	326.5	309.1	297.5	280.0	273.2	263.6	254.8	248.1	241.3	237.4	235.5
47.5°	296.5	278.1	262.6	243.2	232.5	223.8	212.2	205.4	196.7	191.8	188.9
50°	271.3	250.9	233.5	211.2	200.6	190.9	177.3	166.7	158.9	151.2	149.2
52.5°	249.0	227.7	208.3	183.1	170.5	158.9	144.4	132.7	125.9	117.3	116.3
55°	222.8	204.5	183.1	157.0	144.4	132.7	117.3	105.6	96.9	91.1	89.1
57.5°	194.8	177.3	157.0	130.8	118.2	105.6	91.1	80.4	72.7	67.8	66.8
60°	168.6	152.1	132.7	106.6	94.0	83.3	67.8	57.2	50.4	46.5	44.6
62.5°	149.2	133.7	115.3	91.1	79.5	68.8	54.3	44.6	38.7	34.9	32.9
65°	130.8	115.3	98.8	76.5	66.8	57.2	43.6	34.9	29.1	25.2	23.2
67.5°	111.4	97.9	82.3	64.0	54.3	46.5	34.9	27.1	22.3	19.4	17.4
70°	92.0	79.5	66.8	51.4	44.6	36.8	27.1	21.3	16.5	14.5	12.6
72.5°	72.7	63.0	52.3	39.7	33.9	29.1	21.3	15.5	12.6	10.7	8.7
75°	54.3	47.5	38.7	30.0	25.2	21.3	15.5	11.6	9.7	7.7	6.8
77.5°	38.7	32.9	27.1	20.4	18.4	15.5	10.7	8.7	6.8	4.9	3.9
80°	26.2	23.2	18.4	14.5	11.6	10.7	7.7	5.8	3.9	2.9	2.9
82.5°	17.4	14.5	11.6	8.7	7.7	6.8	4.9	3.9	2.9	1.9	1.9
85°	10.7	8.7	6.8	4.9	4.9	3.9	2.9	1.9	1.0	1.0	1.0
87.5°	4.9	3.9	2.9	1.9	1.9	1.0	1.0	1.0	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: P856918

CATALOG NUMBER: LX4C15D010 EX4C159027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9
2.5°	761.6	755.8	751.9	756.7	758.7	755.8	758.7	763.5	768.4	769.3	755.8
5°	762.6	756.7	754.8	760.6	761.6	760.6	763.5	770.3	776.1	778.1	764.5
7.5°	762.6	758.7	757.7	764.5	765.5	764.5	769.3	777.1	782.9	786.8	773.2
10°	760.6	758.7	759.6	765.5	767.4	767.4	774.2	782.9	788.7	792.6	779.0
12.5°	757.7	757.7	757.7	764.5	766.4	767.4	773.2	784.8	788.7	794.5	781.0
15°	752.8	752.8	752.8	759.6	762.6	762.6	769.3	780.0	784.8	790.6	777.1
17.5°	744.2	744.2	745.1	750.9	753.8	753.8	760.6	772.3	775.1	781.9	768.4
20°	731.5	731.5	732.5	738.3	741.2	739.3	748.0	757.7	760.6	766.4	752.8
22.5°	713.1	713.1	713.1	719.0	720.9	719.9	728.7	737.4	737.4	745.1	730.6
25°	686.0	687.9	686.0	691.8	693.7	692.8	700.5	708.3	706.4	715.1	700.5
27.5°	653.1	652.1	652.1	656.9	656.9	656.0	661.8	670.5	668.6	674.4	660.8
30°	607.5	610.4	605.6	612.4	609.5	607.5	611.4	619.2	616.2	621.1	610.4
32.5°	555.2	551.3	551.3	551.3	553.3	548.4	552.3	556.2	553.3	558.1	546.5
35°	486.4	487.4	484.5	485.5	486.4	480.6	484.5	488.3	484.5	487.4	476.7
37.5°	417.6	418.6	411.8	415.7	411.8	409.9	413.7	415.7	411.8	414.7	403.1
40°	348.8	346.9	345.9	345.9	346.9	342.0	345.0	347.8	345.0	346.9	336.2
42.5°	288.7	287.8	285.9	286.8	283.9	282.9	283.9	286.8	283.9	285.9	278.1
45°	236.4	234.5	231.6	232.5	232.5	227.7	230.6	232.5	229.6	230.6	223.8
47.5°	188.0	185.1	185.1	184.1	184.1	182.2	185.1	184.1	181.2	183.1	176.4
50°	146.3	144.4	144.4	144.4	144.4	141.4	142.4	144.4	141.4	141.4	137.6
52.5°	114.3	111.4	109.5	109.5	109.5	108.5	108.5	109.5	106.6	106.6	105.6
55°	86.2	85.3	82.3	82.3	82.3	79.5	80.4	80.4	79.5	79.5	76.5
57.5°	64.0	61.0	59.1	59.1	57.2	57.2	56.2	57.2	55.2	55.2	53.3
60°	42.6	40.7	39.7	38.7	38.7	37.8	38.7	37.8	37.8	36.8	35.9
62.5°	31.0	29.1	27.1	27.1	27.1	26.2	26.2	26.2	26.2	26.2	25.2
65°	22.3	20.4	20.4	19.4	19.4	18.4	18.4	18.4	18.4	18.4	17.4
67.5°	15.5	14.5	13.6	13.6	13.6	13.6	13.6	13.6	12.6	12.6	12.6
70°	11.6	10.7	9.7	9.7	9.7	9.7	9.7	8.7	9.7	9.7	8.7
72.5°	7.7	7.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
75°	5.8	5.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
77.5°	3.9	3.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
80°	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
82.5°	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	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: P856918

CATALOG NUMBER: LX4C15D010 EX4C159027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	751.9	751.9	751.9	751.9	751.9	751.9	751.9	751.9
2.5°	770.3	769.3	767.4	770.3	762.6	759.6	758.7	767.4
5°	781.0	779.0	779.0	781.9	773.2	771.3	769.3	779.0
7.5°	790.6	788.7	788.7	791.6	783.9	781.9	780.0	789.7
10°	796.5	796.5	796.5	798.4	791.6	789.7	788.7	798.4
12.5°	799.4	799.4	798.4	802.3	793.6	793.6	791.6	801.3
15°	795.5	795.5	795.5	798.4	790.6	788.7	788.7	796.5
17.5°	785.8	785.8	784.8	787.8	779.0	779.0	778.1	786.8
20°	771.3	771.3	769.3	773.2	764.5	761.6	760.6	769.3
22.5°	748.0	747.0	746.1	748.0	740.3	738.3	737.4	745.1
25°	718.0	717.0	715.1	717.0	708.3	705.4	705.4	711.2
27.5°	675.4	675.4	672.4	675.4	665.6	664.7	663.7	670.5
30°	623.0	619.2	617.2	621.1	611.4	611.4	609.5	616.2
32.5°	558.1	554.2	553.3	555.2	546.5	543.6	547.4	551.3
35°	483.5	484.5	480.6	480.6	472.8	473.8	474.8	480.6
37.5°	411.8	409.9	408.9	409.9	404.1	402.1	400.2	406.0
40°	345.0	340.1	339.1	339.1	334.3	333.3	334.3	337.2
42.5°	281.9	281.0	277.1	279.1	274.2	276.1	275.2	275.2
45°	227.7	228.7	224.8	227.7	223.8	220.9	220.9	222.8
47.5°	180.2	180.2	179.2	179.2	176.4	177.3	175.4	178.3
50°	139.5	139.5	137.6	138.6	136.6	136.6	135.6	136.6
52.5°	106.6	105.6	105.6	104.6	102.7	103.7	104.6	102.7
55°	77.5	78.5	76.5	77.5	75.6	76.5	75.6	76.5
57.5°	53.3	54.3	52.3	54.3	52.3	53.3	52.3	52.3
60°	36.8	36.8	35.9	36.8	35.9	35.9	34.9	36.8
62.5°	25.2	25.2	25.2	25.2	25.2	24.2	25.2	25.2
65°	18.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4
67.5°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
70°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
72.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
75°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
80°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	0.0	1.0	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)