

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: P859704

Luminaire Tested: **LX4C08D010 EX4C089040 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P859704
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: LX4C08D010 EX4C089040 4LBSWNH
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

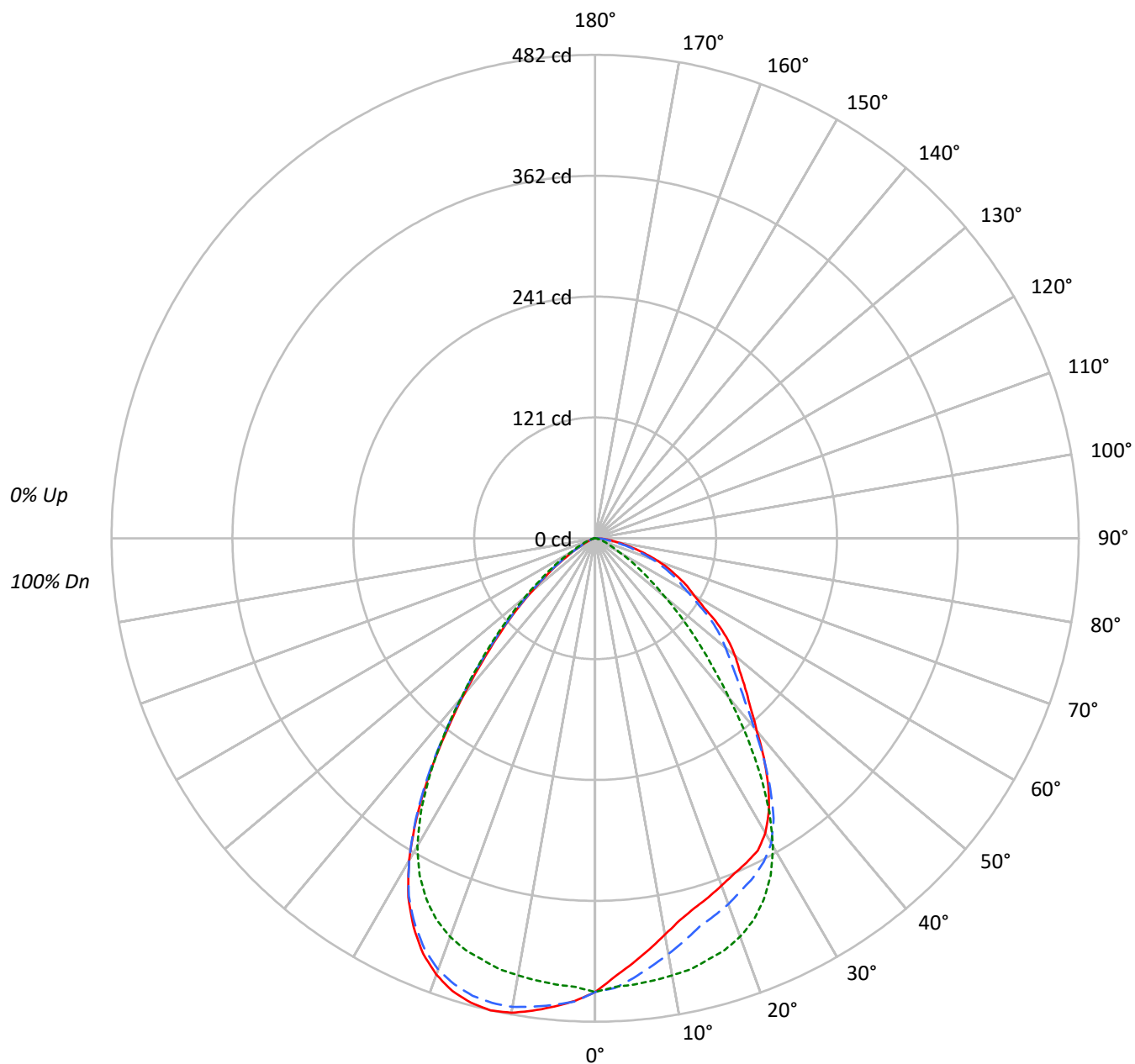
Lumens per Lamp: N/A
Luminaire Lumens: 793.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.9
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: P859704

CATALOG NUMBER: LX4C08D010 EX4C089040 4LBSWNH

Luminous Intensity Polar Plot





TEST NUMBER: P859704

CATALOG NUMBER: LX4C08D010 EX4C089040 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°	55579	55579	55579
5°	52486	55076	57801
10°	50037	55201	59929
15°	48560	55314	60948
20°	48164	55263	60519
25°	48366	53896	58003
30°	48133	50275	52601
35°	45113	42938	43373
40°	40206	33278	32540
45°	36764	24810	23299
50°	34766	17392	15711
55°	31978	11738	9853
60°	27937	6880	5430
65°	26453	4419	3052
70°	24102	3161	1904
75°	19936	2231	1377
80°	15635	1273	849
85°	13955	846	0



TEST NUMBER: P859704

CATALOG NUMBER: LX4C08D010 EX4C089040 4LBSWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	5.4
10°-20°	122.6	15.5
20°-30°	181.8	22.9
30°-40°	182.0	23.0
40°-50°	127.2	16.0
50°-60°	75.7	9.5
60°-70°	39.5	5.0
70°-80°	17.6	2.2
80°-90°	3.8	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°	347.1	43.8
0°-40°	529.2	66.7
0°-60°	732.1	92.3
0°-90°	793.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	793.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	452	452	452	452	452	
5°	426	440	447	467	469	40
15°	382	401	435	472	479	108
25°	357	373	398	425	428	164
35°	301	304	286	292	289	186
45°	212	201	143	138	134	164
55°	149	140	55	48	46	132
65°	91	83	15	11	10	90
75°	42	37	5	3	3	45
85°	10	8	1	1	0	11
90°	0	0	0	0	0	



TEST NUMBER: P859704

CATALOG NUMBER: LX4C08D010 EX4C089040 4LBSWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4
2.5°	437.8	443.1	437.8	439.6	446.6	440.1	443.6	443.6	441.9	446.0	448.9
5°	425.6	430.8	425.6	427.9	435.5	429.1	433.2	432.0	432.6	436.1	440.1
7.5°	413.3	417.4	412.7	415.7	422.7	417.4	420.9	420.9	421.5	426.7	430.3
10°	401.1	404.6	401.1	403.4	411.0	406.3	408.7	409.2	411.0	415.7	420.9
12.5°	390.0	392.9	389.4	392.9	399.3	394.7	397.6	398.2	399.9	405.2	411.0
15°	381.8	384.8	381.3	384.2	390.0	386.5	388.8	390.0	391.2	395.8	401.1
17.5°	375.4	377.8	374.9	378.4	383.0	378.9	382.4	382.4	384.2	388.8	394.7
20°	368.4	370.8	368.4	371.4	376.6	373.1	376.0	376.0	377.8	383.0	388.3
22.5°	362.0	363.2	362.0	364.4	369.6	366.7	368.4	369.0	370.8	375.4	380.1
25°	356.8	359.1	357.9	360.3	363.8	360.9	362.6	363.2	364.9	369.0	373.1
27.5°	351.0	352.1	351.0	353.9	356.8	354.4	356.2	355.6	356.8	360.3	363.8
30°	339.3	340.5	340.5	342.2	344.6	343.4	345.1	343.4	344.6	347.5	351.0
32.5°	322.4	323.0	323.6	325.3	327.0	325.3	326.5	326.5	326.5	328.8	331.1
35°	300.8	302.0	301.4	302.6	304.3	303.7	303.7	303.1	302.0	303.1	304.3
37.5°	276.3	274.6	274.6	276.3	277.5	275.2	276.3	275.2	275.2	275.7	275.7
40°	250.7	248.9	250.7	251.3	251.8	250.7	250.1	248.9	247.2	247.8	246.6
42.5°	229.1	227.9	228.5	228.5	229.1	227.9	228.5	226.2	224.4	223.3	221.5
45°	211.6	209.9	211.6	210.5	210.5	209.9	209.3	208.1	205.8	204.1	201.1
47.5°	195.3	195.3	195.9	195.9	195.9	194.7	194.7	192.4	190.0	187.7	183.6
50°	181.9	180.7	183.1	183.1	181.3	180.7	181.3	178.4	176.7	173.7	169.6
52.5°	167.3	167.3	167.9	167.9	167.3	166.1	166.7	164.4	162.6	159.7	155.7
55°	149.3	148.1	149.8	149.8	149.3	148.7	149.3	147.5	145.8	143.4	139.9
57.5°	128.8	128.3	129.4	130.0	128.8	128.8	129.4	127.7	127.1	124.8	121.3
60°	113.7	113.1	114.3	114.9	113.7	113.7	113.7	111.3	110.2	107.8	105.5
62.5°	103.2	102.6	103.8	103.2	102.6	102.0	102.6	100.3	99.1	96.8	94.5
65°	91.0	91.5	92.1	92.1	91.5	91.0	91.0	89.8	88.6	86.3	83.4
67.5°	79.3	79.3	79.9	80.4	79.9	79.9	79.9	78.1	76.9	75.2	71.7
70°	67.1	66.5	68.2	68.2	67.1	67.6	67.1	66.5	65.3	63.0	60.1
72.5°	54.2	54.2	54.8	54.8	54.2	54.2	54.2	53.6	51.9	50.7	47.8
75°	42.0	42.0	42.6	43.1	42.0	42.0	42.6	41.4	40.2	38.5	36.7
77.5°	31.5	30.9	31.5	31.5	30.9	30.9	30.9	30.3	29.7	28.0	26.2
80°	22.1	21.6	22.1	22.1	22.1	21.6	21.6	21.0	21.0	19.8	18.1
82.5°	15.2	14.6	15.2	15.2	15.2	14.6	14.6	14.6	14.0	13.4	12.2
85°	9.9	9.3	9.3	9.9	9.3	9.3	9.3	9.3	8.8	8.2	7.6
87.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.1	4.1	4.1	3.5
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: P859704

CATALOG NUMBER: LX4C08D010 EX4C089040 4LBSWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4
2.5°	446.6	445.4	448.9	447.7	448.3	445.4	450.1	447.7	450.6	447.7	453.6
5°	439.0	437.8	443.1	442.5	443.1	440.7	446.0	445.4	448.9	446.6	453.0
7.5°	430.8	429.7	435.5	436.1	437.2	434.9	441.9	441.9	445.4	444.8	451.8
10°	421.5	422.1	427.9	429.1	431.4	430.3	436.6	438.4	443.1	442.5	451.2
12.5°	412.7	412.7	420.3	422.7	424.4	423.8	431.4	433.7	439.0	440.1	448.3
15°	404.0	404.6	411.6	415.1	417.4	416.8	425.0	427.9	434.3	434.9	444.8
17.5°	397.0	396.4	404.0	406.9	410.4	409.8	418.6	422.1	428.5	430.3	439.6
20°	391.2	390.6	397.6	401.1	403.4	402.8	411.6	415.7	421.5	422.7	432.0
22.5°	384.2	383.0	390.0	392.9	395.3	394.7	402.3	405.2	411.0	412.2	420.9
25°	376.0	374.9	381.3	383.0	384.8	383.6	390.0	391.8	396.4	397.6	406.3
27.5°	366.7	363.8	369.0	369.0	370.2	368.4	373.1	374.9	378.9	378.9	387.1
30°	352.1	348.0	351.0	350.4	351.0	348.6	351.5	352.1	355.0	354.4	360.3
32.5°	331.7	325.9	327.6	325.9	324.1	320.6	324.1	323.0	325.3	323.0	328.2
35°	303.7	297.9	297.3	295.0	293.2	290.3	290.3	287.4	288.0	286.3	289.8
37.5°	273.4	265.8	264.7	260.0	257.1	253.6	253.6	251.3	248.3	247.2	250.1
40°	243.7	235.5	232.6	225.0	222.1	218.6	216.3	213.4	212.2	207.5	209.9
42.5°	218.0	209.3	202.9	194.7	191.8	186.5	183.1	179.6	177.8	172.6	174.9
45°	196.5	186.0	179.0	168.5	164.4	158.6	153.3	149.3	145.2	142.8	141.7
47.5°	178.4	167.3	158.0	146.3	139.9	134.7	127.7	123.6	118.4	115.4	113.7
50°	163.2	151.0	140.5	127.1	120.7	114.9	106.7	100.3	95.6	91.0	89.8
52.5°	149.8	137.0	125.3	110.2	102.6	95.6	86.9	79.9	75.8	70.5	70.0
55°	134.1	123.0	110.2	94.5	86.9	79.9	70.5	63.6	58.3	54.8	53.6
57.5°	117.2	106.7	94.5	78.7	71.1	63.6	54.8	48.4	43.7	40.8	40.2
60°	101.4	91.5	79.9	64.1	56.5	50.1	40.8	34.4	30.3	28.0	26.8
62.5°	89.8	80.4	69.4	54.8	47.8	41.4	32.7	26.8	23.3	21.0	19.8
65°	78.7	69.4	59.5	46.0	40.2	34.4	26.2	21.0	17.5	15.2	14.0
67.5°	67.1	58.9	49.5	38.5	32.7	28.0	21.0	16.3	13.4	11.7	10.5
70°	55.4	47.8	40.2	30.9	26.8	22.1	16.3	12.8	9.9	8.8	7.6
72.5°	43.7	37.9	31.5	23.9	20.4	17.5	12.8	9.3	7.6	6.4	5.3
75°	32.7	28.6	23.3	18.1	15.2	12.8	9.3	7.0	5.8	4.7	4.1
77.5°	23.3	19.8	16.3	12.2	11.1	9.3	6.4	5.3	4.1	2.9	2.3
80°	15.7	14.0	11.1	8.8	7.0	6.4	4.7	3.5	2.3	1.8	1.8
82.5°	10.5	8.8	7.0	5.3	4.7	4.1	2.9	2.3	1.8	1.2	1.2
85°	6.4	5.3	4.1	2.9	2.9	2.3	1.8	1.2	0.6	0.6	0.6
87.5°	2.9	2.3	1.8	1.2	1.2	0.6	0.6	0.6	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: P859704

CATALOG NUMBER: LX4C08D010 EX4C089040 4LBSWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4
2.5°	458.2	454.7	452.4	455.3	456.5	454.7	456.5	459.4	462.3	462.9	454.7
5°	458.8	455.3	454.1	457.6	458.2	457.6	459.4	463.5	467.0	468.1	460.0
7.5°	458.8	456.5	455.9	460.0	460.6	460.0	462.9	467.5	471.0	473.4	465.2
10°	457.6	456.5	457.1	460.6	461.7	461.7	465.8	471.0	474.5	476.9	468.7
12.5°	455.9	455.9	455.9	460.0	461.1	461.7	465.2	472.2	474.5	478.0	469.9
15°	453.0	453.0	453.0	457.1	458.8	458.8	462.9	469.3	472.2	475.7	467.5
17.5°	447.7	447.7	448.3	451.8	453.6	453.6	457.6	464.6	466.4	470.5	462.3
20°	440.1	440.1	440.7	444.2	446.0	444.8	450.1	455.9	457.6	461.1	453.0
22.5°	429.1	429.1	429.1	432.6	433.7	433.2	438.4	443.6	443.6	448.3	439.6
25°	412.7	413.9	412.7	416.2	417.4	416.8	421.5	426.2	425.0	430.3	421.5
27.5°	392.9	392.3	392.3	395.3	395.3	394.7	398.2	403.4	402.3	405.8	397.6
30°	365.5	367.3	364.4	368.4	366.7	365.5	367.9	372.5	370.8	373.7	367.3
32.5°	334.0	331.7	331.7	331.7	332.9	330.0	332.3	334.6	332.9	335.8	328.8
35°	292.7	293.2	291.5	292.1	292.7	289.2	291.5	293.8	291.5	293.2	286.8
37.5°	251.3	251.8	247.8	250.1	247.8	246.6	248.9	250.1	247.8	249.5	242.5
40°	209.9	208.7	208.1	208.1	208.7	205.8	207.5	209.3	207.5	208.7	202.3
42.5°	173.7	173.2	172.0	172.6	170.8	170.2	170.8	172.6	170.8	172.0	167.3
45°	142.2	141.1	139.3	139.9	139.9	137.0	138.7	139.9	138.2	138.7	134.7
47.5°	113.1	111.3	111.3	110.8	110.8	109.6	111.3	110.8	109.0	110.2	106.1
50°	88.0	86.9	86.9	86.9	86.9	85.1	85.7	86.9	85.1	85.1	82.8
52.5°	68.8	67.1	65.9	65.9	65.9	65.3	65.3	65.9	64.1	64.1	63.6
55°	51.9	51.3	49.5	49.5	49.5	47.8	48.4	48.4	47.8	47.8	46.0
57.5°	38.5	36.7	35.6	35.6	34.4	34.4	33.8	34.4	33.2	33.2	32.1
60°	25.6	24.5	23.9	23.3	23.3	22.7	23.3	22.7	22.7	22.1	21.6
62.5°	18.6	17.5	16.3	16.3	16.3	15.7	15.7	15.7	15.7	15.7	15.2
65°	13.4	12.2	12.2	11.7	11.7	11.1	11.1	11.1	11.1	11.1	10.5
67.5°	9.3	8.8	8.2	8.2	8.2	8.2	8.2	8.2	7.6	7.6	7.6
70°	7.0	6.4	5.8	5.8	5.8	5.8	5.8	5.3	5.8	5.8	5.3
72.5°	4.7	4.7	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	3.5	3.5	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.3	2.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80°	1.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	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: P859704

CATALOG NUMBER: LX4C08D010 EX4C089040 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	452.4	452.4	452.4	452.4	452.4	452.4	452.4	452.4
2.5°	463.5	462.9	461.7	463.5	458.8	457.1	456.5	461.7
5°	469.9	468.7	468.7	470.5	465.2	464.0	462.9	468.7
7.5°	475.7	474.5	474.5	476.3	471.6	470.5	469.3	475.1
10°	479.2	479.2	479.2	480.4	476.3	475.1	474.5	480.4
12.5°	481.0	481.0	480.4	482.7	477.5	477.5	476.3	482.1
15°	478.6	478.6	478.6	480.4	475.7	474.5	474.5	479.2
17.5°	472.8	472.8	472.2	474.0	468.7	468.7	468.1	473.4
20°	464.0	464.0	462.9	465.2	460.0	458.2	457.6	462.9
22.5°	450.1	449.5	448.9	450.1	445.4	444.2	443.6	448.3
25°	432.0	431.4	430.3	431.4	426.2	424.4	424.4	427.9
27.5°	406.3	406.3	404.6	406.3	400.5	399.9	399.3	403.4
30°	374.9	372.5	371.4	373.7	367.9	367.9	366.7	370.8
32.5°	335.8	333.5	332.9	334.0	328.8	327.0	329.4	331.7
35°	290.9	291.5	289.2	289.2	284.5	285.1	285.7	289.2
37.5°	247.8	246.6	246.0	246.6	243.1	241.9	240.8	244.3
40°	207.5	204.6	204.1	204.1	201.1	200.6	201.1	202.9
42.5°	169.6	169.1	166.7	167.9	165.0	166.1	165.6	165.6
45°	137.0	137.6	135.2	137.0	134.7	132.9	132.9	134.1
47.5°	108.4	108.4	107.8	107.8	106.1	106.7	105.5	107.3
50°	83.9	83.9	82.8	83.4	82.2	82.2	81.6	82.2
52.5°	64.1	63.6	63.6	63.0	61.8	62.4	63.0	61.8
55°	46.6	47.2	46.0	46.6	45.5	46.0	45.5	46.0
57.5°	32.1	32.7	31.5	32.7	31.5	32.1	31.5	31.5
60°	22.1	22.1	21.6	22.1	21.6	21.6	21.0	22.1
62.5°	15.2	15.2	15.2	15.2	15.2	14.6	15.2	15.2
65°	11.1	10.5	10.5	10.5	10.5	10.5	10.5	10.5
67.5°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
70°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
72.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.6	0.6	0.6	0.0	0.6	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)