

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: FAIL-SAFE

Report Number: P735606

Luminaire Tested: **4APN6-29-B2750-W2D-CP125-4000K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P735606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P709119)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4APN6-29-B2750-W2D-CP125-4000K
Description: 4FT 2900 AMBIENT LUMEN OUTPUT APN WITH BIO UP LEDS AT 4000K CCT, AND CP125 LENS

Light Source: -
Ballast/Driver: -

Summary

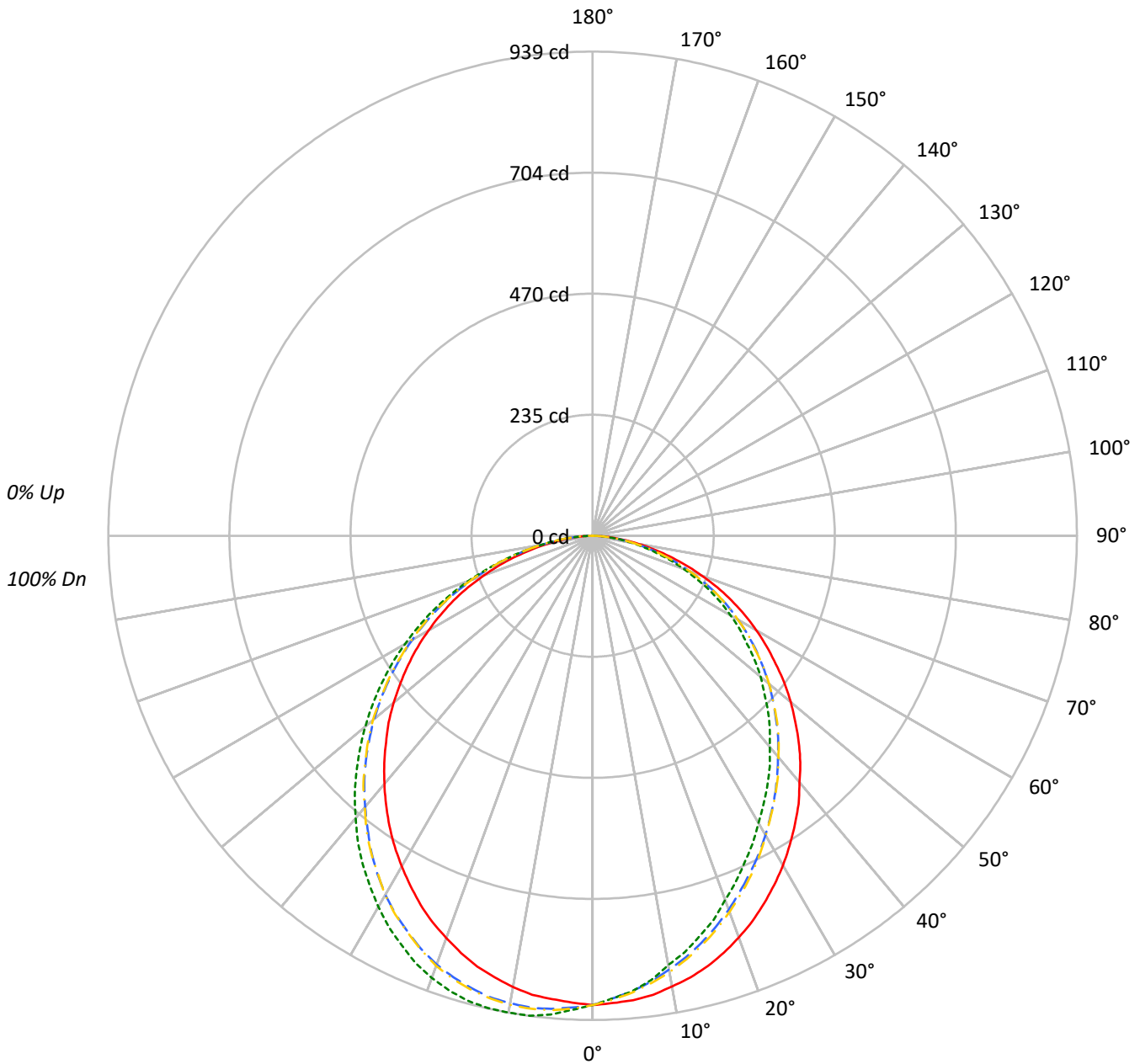
Lumens per Lamp: N/A
Luminaire Lumens: 2441.0 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.5
Input Voltage (V): NR
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: P735606

CATALOG NUMBER: 4APN6-29-B2750-W2D-CP125-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P735606

CATALOG NUMBER: 4APN6-29-B2750-W2D-CP125-4000K

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	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84			
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70			
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59			
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51			
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44			
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	41	38			
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34			
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30			
9	57	43	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8397	8397	8397	8397
5°	8372	8210	8353	8630
10°	8315	7919	8325	8796
15°	8251	7671	8261	8919
20°	8138	7379	8148	8956
25°	8008	7107	8038	8920
30°	7864	6856	7886	8851
35°	7699	6655	7734	8756
40°	7514	6435	7565	8605
45°	7375	6275	7389	8450
50°	7198	6103	7226	8260
55°	6971	5879	7021	8033
60°	6763	5700	6783	7752
65°	6495	5462	6495	7418
70°	6053	5055	6029	6914
75°	5504	4588	5433	6206
80°	4761	3942	4596	5308
85°	3716	2943	3493	4361



TEST NUMBER: P735606

CATALOG NUMBER: 4APN6-29-B2750-W2D-CP125-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.0	3.5
10°-20°	244.1	10.0
20°-30°	362.9	14.9
30°-40°	427.7	17.5
40°-50°	435.5	17.8
50°-60°	387.9	15.9
60°-70°	292.3	12.0
70°-80°	162.5	6.7
80°-90°	42.2	1.7
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°	692.9	28.4
0°-40°	1120.6	45.9
0°-60°	1944.0	79.6
0°-90°	2441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2441.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	910	910	910	910	910	
5°	904	886	902	932	904	86
15°	864	803	865	934	864	243
25°	787	698	790	876	787	362
35°	684	591	687	777	684	428
45°	565	481	566	648	565	436
55°	433	366	436	499	433	388
65°	298	250	298	340	298	294
75°	154	129	152	174	154	164
85°	35	28	33	41	35	42
90°	0	0	0	0	0	



TEST NUMBER: P735606

CATALOG NUMBER: 4APN6-29-B2750-W2D-CP125-4000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1
2.5°	907.1	907.1	908.1	904.0	898.9	896.8	895.8	894.7	896.8	897.8	896.8
5°	904.0	901.9	899.8	894.7	888.6	884.4	882.3	881.3	883.4	886.5	883.4
7.5°	897.8	893.7	889.5	882.3	875.2	869.0	865.9	863.8	865.9	869.0	866.9
10°	887.5	882.3	876.2	868.0	857.7	850.4	847.4	844.3	845.3	845.3	845.3
12.5°	877.2	870.1	862.8	852.5	841.1	832.9	827.8	823.7	825.7	826.8	826.8
15°	863.8	854.6	844.3	832.9	821.6	812.3	806.2	802.0	803.1	803.1	804.1
17.5°	847.4	837.1	826.8	813.4	799.9	789.6	782.5	777.4	779.3	780.5	781.4
20°	828.9	817.5	806.2	791.7	777.4	766.0	758.8	752.6	751.6	751.6	752.6
22.5°	809.3	796.9	783.5	768.1	752.6	740.2	733.0	726.9	725.9	725.9	726.9
25°	786.6	773.2	759.9	744.4	727.9	715.6	706.3	700.2	699.1	698.1	700.2
27.5°	762.9	749.6	736.2	720.8	703.2	690.8	681.5	675.4	673.3	672.3	674.4
30°	738.2	722.7	708.4	691.8	676.4	664.1	654.8	647.6	645.6	643.5	645.6
32.5°	711.4	696.0	680.6	664.1	648.7	636.3	627.0	619.9	617.8	616.7	618.8
35°	683.6	668.2	653.8	637.3	621.8	609.6	600.3	594.1	592.1	590.9	592.1
37.5°	655.8	640.5	626.0	609.6	594.1	581.8	572.4	566.3	565.2	564.2	565.2
40°	623.9	610.6	596.1	580.7	565.2	552.9	545.7	538.5	536.4	534.3	537.5
42.5°	596.1	582.7	568.4	553.9	538.5	526.1	517.9	511.8	509.7	508.6	509.7
45°	565.2	550.9	536.4	523.0	508.6	497.3	489.1	482.8	481.9	480.9	481.9
47.5°	532.4	520.0	507.6	494.2	479.8	468.5	461.3	455.1	453.0	451.0	453.0
50°	501.5	489.1	476.7	464.3	451.0	440.7	433.4	427.3	426.2	425.2	426.2
52.5°	468.5	456.1	444.8	432.5	421.1	410.8	403.6	398.5	397.4	396.4	397.4
55°	433.4	423.1	412.8	402.5	391.3	382.0	375.8	369.6	367.6	365.5	367.6
57.5°	400.5	391.3	381.0	370.7	360.4	352.2	345.9	340.8	339.8	338.7	339.8
60°	366.5	358.3	349.0	339.8	329.5	321.3	316.1	312.0	309.9	308.9	309.9
62.5°	332.6	324.3	317.1	307.8	298.6	292.3	287.2	283.2	281.1	280.1	281.1
65°	297.5	290.4	283.2	274.9	267.7	261.5	256.3	252.3	251.2	250.2	250.2
67.5°	261.5	255.3	249.2	242.0	233.8	227.5	222.4	219.3	218.3	217.2	218.3
70°	224.4	219.3	213.2	206.9	200.8	195.6	192.6	189.5	188.4	187.4	187.4
72.5°	189.5	185.3	180.2	175.0	169.9	164.7	161.7	159.6	158.6	157.5	157.5
75°	154.4	150.3	147.2	143.2	138.0	134.8	131.8	129.7	128.7	128.7	128.7
77.5°	121.5	118.4	115.3	111.2	108.1	105.0	103.0	102.0	100.9	100.9	100.9
80°	89.6	87.5	85.4	83.4	80.3	77.2	76.2	75.1	74.2	74.2	74.2
82.5°	60.8	59.7	57.6	55.7	53.6	52.5	51.5	50.5	50.5	50.5	50.5
85°	35.1	34.0	33.0	31.9	30.9	30.9	29.9	28.8	27.8	27.8	27.8
87.5°	14.5	14.5	14.5	13.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
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: P735606

CATALOG NUMBER: 4APN6-29-B2750-W2D-CP125-4000K

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1
2.5°	894.7	896.8	898.9	901.9	905.0	908.1	907.1	906.1	910.1	915.3	916.4
5°	881.3	883.4	886.5	891.6	896.8	900.9	901.9	901.9	910.1	917.4	919.5
7.5°	864.9	868.0	872.0	877.2	884.4	890.6	893.7	897.8	906.1	915.3	919.5
10°	844.3	849.5	855.6	862.8	870.1	877.2	883.4	888.6	898.9	909.2	915.3
12.5°	825.7	830.8	837.1	845.3	854.6	863.8	870.1	877.2	889.5	901.9	909.2
15°	805.1	810.2	817.5	825.7	836.0	846.3	855.6	864.9	877.2	890.6	898.9
17.5°	782.5	787.7	794.8	805.1	816.5	827.8	838.1	848.4	862.8	877.2	886.5
20°	754.7	761.9	771.1	781.4	794.8	808.3	818.6	829.9	845.3	860.7	871.0
22.5°	727.9	735.1	745.4	757.8	772.2	786.6	799.0	811.3	827.8	843.2	854.6
25°	702.1	710.5	720.8	733.0	746.5	760.8	775.3	789.6	806.2	822.6	834.0
27.5°	676.4	683.6	693.9	706.3	721.7	736.2	750.5	765.0	782.5	799.9	812.3
30°	647.6	655.8	665.1	677.5	693.9	710.5	724.8	740.2	757.8	775.3	787.7
32.5°	620.9	628.1	637.3	649.7	666.1	682.6	698.1	714.5	731.1	748.5	760.8
35°	594.1	601.2	610.6	622.9	639.4	655.8	671.2	686.7	703.2	719.7	732.0
37.5°	567.3	574.5	583.8	596.1	611.5	628.1	642.4	657.9	674.4	690.8	702.1
40°	539.5	546.7	553.9	566.3	581.8	598.2	612.6	628.1	644.5	660.9	672.3
42.5°	511.8	518.9	528.2	540.6	554.9	569.4	583.8	598.2	613.6	629.1	640.5
45°	483.9	490.1	499.4	510.7	525.1	538.5	552.9	566.3	581.8	596.1	607.5
47.5°	455.1	461.3	468.5	479.8	494.2	508.6	523.0	536.4	549.8	564.2	574.5
50°	427.3	433.4	441.6	451.9	465.4	478.8	491.2	503.4	516.9	530.3	539.5
52.5°	398.5	404.6	411.9	422.2	433.4	445.8	457.1	469.5	481.9	494.2	503.4
55°	369.6	373.7	379.9	389.2	401.6	413.9	425.2	436.5	447.9	458.2	467.4
57.5°	340.8	345.9	353.1	361.4	371.7	382.0	392.2	402.5	412.8	423.1	431.4
60°	312.0	316.1	321.3	328.4	338.7	348.0	358.3	367.6	376.8	386.1	393.4
62.5°	282.1	286.2	291.4	298.6	306.8	315.0	324.3	332.6	340.8	349.0	356.2
65°	251.2	255.3	260.5	266.6	273.8	281.1	289.3	297.5	303.7	309.9	317.1
67.5°	219.3	223.5	228.6	233.8	239.9	247.1	254.3	261.5	267.7	273.8	279.0
70°	188.4	191.5	196.6	200.8	205.9	211.1	217.2	223.5	227.5	232.7	238.9
72.5°	158.6	161.7	165.7	169.9	173.0	177.1	183.3	188.4	193.6	199.8	202.9
75°	129.7	131.8	134.8	138.0	141.1	144.2	148.3	152.4	156.5	159.6	163.8
77.5°	100.9	103.0	106.0	108.1	110.2	112.3	115.3	118.4	121.5	123.6	127.7
80°	74.2	76.2	78.2	80.3	82.4	84.5	85.4	86.5	90.6	93.6	95.7
82.5°	50.5	51.5	52.5	54.5	55.7	56.6	57.6	57.6	59.7	61.8	64.8
85°	28.8	29.9	30.9	30.9	30.9	30.9	31.9	33.0	34.0	36.0	38.1
87.5°	11.3	11.3	12.4	12.4	12.4	12.4	12.4	12.4	13.4	15.4	16.4
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: P735606

CATALOG NUMBER: 4APN6-29-B2750-W2D-CP125-4000K

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1	910.1
2.5°	915.3	916.4	918.4	919.5	920.4	920.4	921.5	922.5	920.4	918.4	917.4
5°	920.4	921.5	924.6	927.7	929.8	931.8	930.7	929.8	927.7	924.6	922.5
7.5°	921.5	924.6	927.7	931.8	934.9	938.9	937.0	934.9	930.7	926.7	923.5
10°	918.4	922.5	927.7	932.8	935.9	938.9	937.0	934.9	930.7	925.6	921.5
12.5°	914.3	919.5	925.6	930.7	933.8	938.0	934.9	931.8	926.7	921.5	916.4
15°	905.0	911.2	918.4	924.6	929.8	933.8	930.7	928.6	922.5	915.3	908.1
17.5°	893.7	901.9	909.2	916.4	920.4	924.6	922.5	920.4	913.2	905.0	896.8
20°	880.4	888.6	895.8	902.9	908.1	912.2	909.2	906.1	898.9	891.6	883.4
22.5°	863.8	872.0	880.4	887.5	892.6	896.8	892.6	887.5	880.4	873.1	864.9
25°	843.2	852.5	861.7	869.0	872.0	876.2	872.0	868.0	860.7	853.5	844.3
27.5°	822.6	831.9	841.1	848.4	851.4	855.6	851.4	847.4	840.1	832.9	823.7
30°	799.0	808.3	817.5	824.7	827.8	830.8	826.8	822.6	816.5	809.3	799.9
32.5°	772.2	781.4	788.7	795.9	799.9	804.1	799.9	796.9	789.6	780.5	771.1
35°	743.3	752.6	761.9	769.1	773.2	777.4	772.2	767.1	760.8	753.6	745.4
37.5°	711.4	721.7	732.0	740.2	743.3	747.5	743.3	738.2	732.0	724.8	715.6
40°	681.5	690.8	700.2	708.4	711.4	714.5	710.5	706.3	699.1	691.8	682.6
42.5°	650.8	660.0	668.2	675.4	678.5	682.6	678.5	673.3	668.2	662.0	653.8
45°	617.8	627.0	634.2	641.4	644.5	647.6	643.5	638.4	633.2	628.1	619.9
47.5°	583.8	592.1	599.3	606.4	608.5	611.5	607.5	604.4	599.3	594.1	586.9
50°	548.8	557.0	564.2	570.4	572.4	575.5	571.5	567.3	563.2	559.1	552.9
52.5°	512.7	520.0	527.2	533.3	535.4	537.5	533.3	529.2	525.1	521.0	514.8
55°	475.7	482.8	490.1	495.2	497.3	499.4	495.2	492.1	488.0	484.9	478.8
57.5°	438.6	445.8	451.9	457.1	459.2	461.3	457.1	453.0	450.0	446.8	441.6
60°	400.5	407.7	412.8	417.0	419.1	420.1	415.9	412.8	410.8	408.8	403.6
62.5°	363.4	368.6	373.7	376.8	378.9	379.9	376.8	374.7	372.8	370.7	366.5
65°	324.3	330.5	334.6	337.7	338.7	339.8	336.7	334.6	332.6	330.5	327.4
67.5°	285.2	290.4	293.5	296.5	297.5	297.5	297.5	296.5	294.4	291.4	288.3
70°	246.0	250.2	253.2	255.3	256.3	256.3	254.3	252.3	252.3	251.2	249.2
72.5°	205.9	209.0	211.1	213.2	213.2	213.2	213.2	214.1	213.2	211.1	208.0
75°	167.8	170.9	173.0	174.1	174.1	174.1	174.1	175.0	174.1	173.0	170.9
77.5°	131.8	133.9	134.8	135.9	135.9	135.9	136.9	138.0	136.9	135.9	134.8
80°	97.8	98.8	99.9	100.9	99.9	99.9	100.9	103.0	102.0	100.9	99.9
82.5°	66.9	67.9	69.0	69.0	70.0	71.1	71.1	71.1	71.1	70.0	69.0
85°	40.2	41.2	41.2	41.2	41.2	41.2	42.2	43.3	43.3	42.2	42.2
87.5°	18.5	19.6	18.5	17.5	16.4	16.4	18.5	20.6	20.6	19.6	19.6
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: P735606

CATALOG NUMBER: 4APN6-29-B2750-W2D-CP125-4000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	910.1	910.1	910.1	910.1
2.5°	918.4	917.4	912.2	907.1
5°	921.5	918.4	911.2	904.0
7.5°	921.5	917.4	907.1	897.8
10°	916.4	910.1	898.9	887.5
12.5°	910.1	902.9	889.5	877.2
15°	900.9	892.6	878.3	863.8
17.5°	887.5	877.2	862.8	847.4
20°	874.1	862.8	845.3	828.9
22.5°	855.6	845.3	826.8	809.3
25°	835.0	823.7	805.1	786.6
27.5°	813.4	799.9	781.4	762.9
30°	788.7	775.3	756.8	738.2
32.5°	761.9	749.6	731.1	711.4
35°	735.1	721.7	703.2	683.6
37.5°	705.3	692.9	674.4	655.8
40°	673.3	660.9	642.4	623.9
42.5°	643.5	632.1	613.6	596.1
45°	610.6	599.3	581.8	565.2
47.5°	576.6	565.2	548.8	532.4
50°	543.6	532.4	516.9	501.5
52.5°	506.6	497.3	482.8	468.5
55°	470.6	461.3	446.8	433.4
57.5°	434.5	426.2	412.8	400.5
60°	396.4	388.2	377.9	366.5
62.5°	360.4	353.1	342.8	332.6
65°	322.3	316.1	306.8	297.5
67.5°	283.2	278.0	269.8	261.5
70°	244.1	237.8	231.7	224.4
72.5°	204.9	201.8	195.6	189.5
75°	167.8	164.7	159.6	154.4
77.5°	132.9	129.7	125.6	121.5
80°	97.8	95.7	92.7	89.6
82.5°	67.9	65.9	63.9	60.8
85°	41.2	39.1	37.0	35.1
87.5°	18.5	17.5	15.4	14.5
90°	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270° - · - · 135°-315°













(END OF REPORT)