

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: P735579

Luminaire Tested: **4APN6-19-B2750-W2D-CP250-3000K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P735579
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: 4APN6-19-B2750-W2D-CP250-3000K
Description: 4FT 1900 AMBIENT LUMEN OUTPUT APN WITH BIO UP LEDS AT 3000K CCT, AND CP250 LENS

Light Source: -
Ballast/Driver: -

Summary

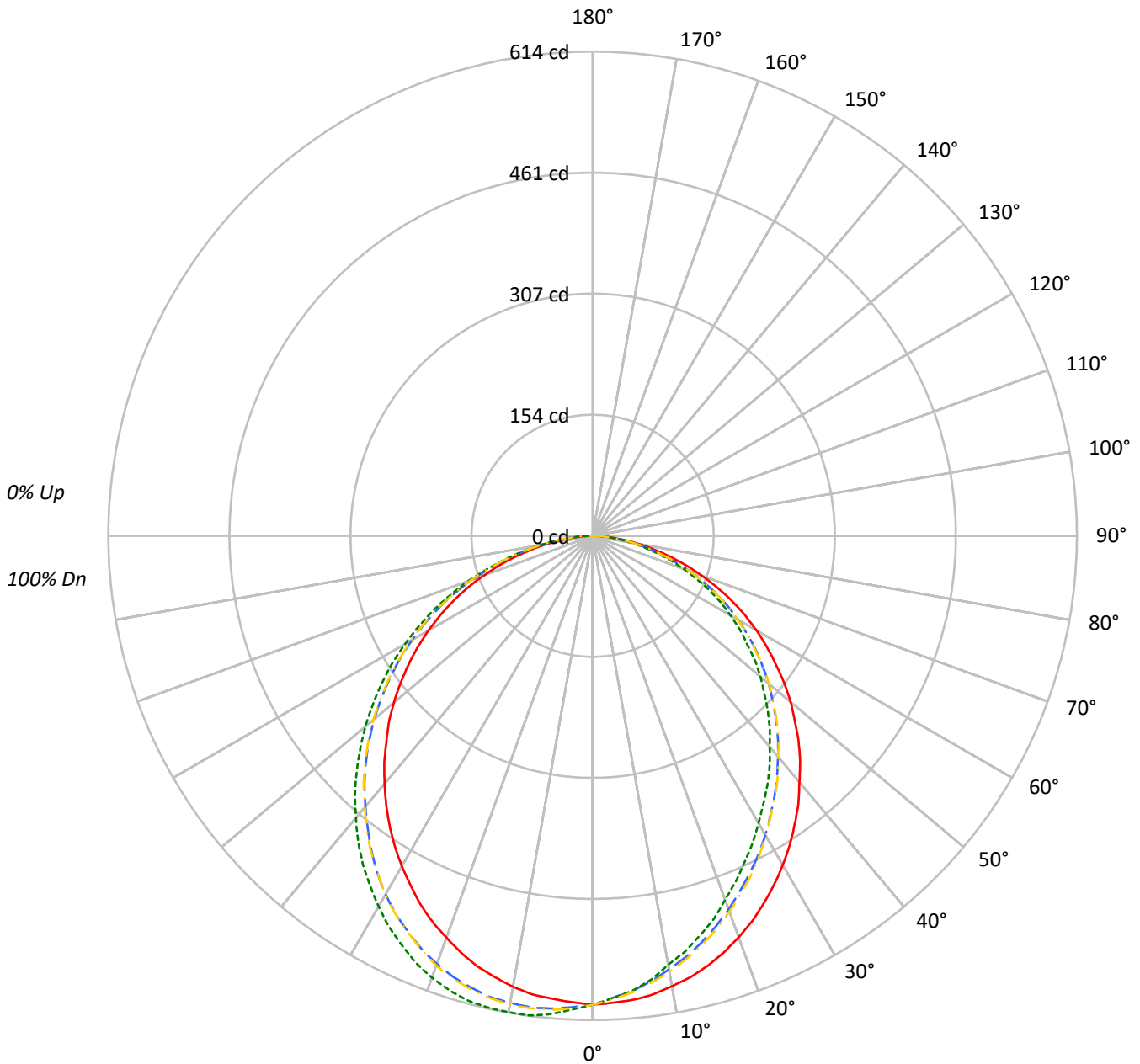
Lumens per Lamp: N/A
Luminaire Lumens: 1595.0 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19
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: P735579

CATALOG NUMBER: 4APN6-19-B2750-W2D-CP250-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P735579

CATALOG NUMBER: 4APN6-19-B2750-W2D-CP250-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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°	5487	5487	5487	5487
5°	5471	5364	5458	5639
10°	5433	5174	5439	5748
15°	5391	5013	5398	5828
20°	5318	4822	5323	5853
25°	5233	4643	5253	5828
30°	5138	4480	5153	5784
35°	5031	4349	5054	5722
40°	4910	4205	4943	5623
45°	4819	4100	4828	5521
50°	4704	3987	4721	5397
55°	4555	3841	4588	5249
60°	4419	3724	4432	5065
65°	4244	3569	4244	4846
70°	3957	3305	3938	4518
75°	3597	2998	3550	4053
80°	3108	2577	3002	3469
85°	2424	1927	2276	2848



TEST NUMBER: P735579

CATALOG NUMBER: 4APN6-19-B2750-W2D-CP250-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	3.5
10°-20°	159.5	10.0
20°-30°	237.1	14.9
30°-40°	279.4	17.5
40°-50°	284.5	17.8
50°-60°	253.5	15.9
60°-70°	191.0	12.0
70°-80°	106.2	6.7
80°-90°	27.6	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°	452.8	28.4
0°-40°	732.2	45.9
0°-60°	1270.2	79.6
0°-90°	1595.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1595.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	595	595	595	595	595	
5°	591	579	589	609	591	56
15°	564	525	565	610	564	159
25°	514	456	516	572	514	237
35°	447	386	449	508	447	279
45°	369	314	370	423	369	285
55°	283	239	285	326	283	254
65°	194	164	194	222	194	192
75°	101	84	100	114	101	107
85°	23	18	22	27	23	28
90°	0	0	0	0	0	



TEST NUMBER: P735579

CATALOG NUMBER: 4APN6-19-B2750-W2D-CP250-3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7
2.5°	592.7	592.7	593.3	590.7	587.3	586.0	585.3	584.6	586.0	586.6	586.0
5°	590.7	589.3	588.0	584.6	580.6	577.9	576.5	575.9	577.2	579.2	577.2
7.5°	586.6	584.0	581.2	576.5	571.9	567.8	565.8	564.4	565.8	567.8	566.4
10°	579.9	576.5	572.5	567.2	560.4	555.7	553.7	551.7	552.3	552.3	552.3
12.5°	573.2	568.5	563.8	557.1	549.6	544.2	540.9	538.2	539.5	540.2	540.2
15°	564.4	558.4	551.7	544.2	536.9	530.8	526.8	524.1	524.8	524.8	525.4
17.5°	553.7	547.0	540.2	531.5	522.7	516.0	511.3	508.0	509.2	510.0	510.6
20°	541.6	534.2	526.8	517.3	508.0	500.5	495.8	491.8	491.1	491.1	491.8
22.5°	528.8	520.7	512.0	501.9	491.8	483.7	479.0	475.0	474.3	474.3	475.0
25°	514.0	505.2	496.5	486.4	475.6	467.6	461.5	457.5	456.8	456.1	457.5
27.5°	498.5	489.8	481.0	471.0	459.5	451.4	445.3	441.3	440.0	439.3	440.7
30°	482.3	472.2	462.9	452.1	442.0	434.0	427.9	423.1	421.9	420.5	421.9
32.5°	464.9	454.8	444.7	434.0	423.9	415.8	409.7	405.0	403.7	403.0	404.3
35°	446.7	436.6	427.2	416.4	406.3	398.3	392.2	388.2	386.9	386.1	386.9
37.5°	428.5	418.5	409.0	398.3	388.2	380.1	374.0	370.0	369.3	368.7	369.3
40°	407.7	399.0	389.5	379.4	369.3	361.3	356.6	351.9	350.5	349.1	351.2
42.5°	389.5	380.8	371.4	361.9	351.9	343.8	338.4	334.4	333.0	332.3	333.0
45°	369.3	359.9	350.5	341.8	332.3	324.9	319.6	315.5	314.9	314.2	314.9
47.5°	347.9	339.8	331.7	322.9	313.5	306.1	301.4	297.4	296.0	294.7	296.0
50°	327.7	319.6	311.5	303.4	294.7	287.9	283.2	279.2	278.5	277.8	278.5
52.5°	306.1	298.0	290.7	282.6	275.1	268.4	263.8	260.4	259.7	259.0	259.7
55°	283.2	276.5	269.8	263.0	255.7	249.6	245.6	241.5	240.2	238.8	240.2
57.5°	261.7	255.7	248.9	242.2	235.5	230.1	226.0	222.7	222.0	221.3	222.0
60°	239.5	234.1	228.0	222.0	215.3	209.9	206.6	203.8	202.5	201.8	202.5
62.5°	217.3	211.9	207.2	201.1	195.1	191.0	187.7	185.0	183.7	183.0	183.7
65°	194.4	189.7	185.0	179.7	174.9	170.8	167.5	164.8	164.1	163.5	163.5
67.5°	170.8	166.8	162.8	158.1	152.7	148.7	145.3	143.3	142.6	141.9	142.6
70°	146.7	143.3	139.3	135.2	131.2	127.8	125.8	123.8	123.1	122.5	122.5
72.5°	123.8	121.1	117.7	114.4	111.0	107.6	105.6	104.3	103.6	102.9	102.9
75°	100.9	98.2	96.2	93.6	90.2	88.1	86.1	84.7	84.1	84.1	84.1
77.5°	79.4	77.4	75.4	72.6	70.6	68.6	67.3	66.6	65.9	65.9	65.9
80°	58.5	57.2	55.8	54.5	52.5	50.5	49.8	49.1	48.5	48.5	48.5
82.5°	39.7	39.0	37.6	36.4	35.0	34.3	33.6	33.0	33.0	33.0	33.0
85°	22.9	22.2	21.5	20.8	20.2	20.2	19.5	18.8	18.2	18.2	18.2
87.5°	9.5	9.5	9.5	8.7	8.1	8.1	8.1	8.1	8.1	8.1	8.1
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: P735579

CATALOG NUMBER: 4APN6-19-B2750-W2D-CP250-3000K

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7
2.5°	584.6	586.0	587.3	589.3	591.3	593.3	592.7	592.1	594.7	598.1	598.8
5°	575.9	577.2	579.2	582.6	586.0	588.7	589.3	589.3	594.7	599.4	600.8
7.5°	565.1	567.2	569.8	573.2	577.9	582.0	584.0	586.6	592.1	598.1	600.8
10°	551.7	555.1	559.1	563.8	568.5	573.2	577.2	580.6	587.3	594.1	598.1
12.5°	539.5	542.9	547.0	552.3	558.4	564.4	568.5	573.2	581.2	589.3	594.1
15°	526.1	529.4	534.2	539.5	546.2	553.0	559.1	565.1	573.2	582.0	587.3
17.5°	511.3	514.7	519.3	526.1	533.5	540.9	547.6	554.3	563.8	573.2	579.2
20°	493.1	497.9	503.9	510.6	519.3	528.1	534.9	542.2	552.3	562.4	569.2
22.5°	475.6	480.3	487.1	495.1	504.6	514.0	522.1	530.1	540.9	551.0	558.4
25°	458.8	464.2	471.0	479.0	487.8	497.1	506.6	516.0	526.8	537.5	545.0
27.5°	442.0	446.7	453.4	461.5	471.6	481.0	490.4	499.9	511.3	522.7	530.8
30°	423.1	428.5	434.6	442.7	453.4	464.2	473.6	483.7	495.1	506.6	514.7
32.5°	405.7	410.4	416.4	424.5	435.2	446.0	456.1	466.9	477.7	489.1	497.1
35°	388.2	392.9	399.0	407.0	417.8	428.5	438.6	448.7	459.5	470.2	478.3
37.5°	370.7	375.4	381.5	389.5	399.6	410.4	419.8	429.9	440.7	451.4	458.8
40°	352.5	357.2	361.9	370.0	380.1	390.9	400.3	410.4	421.1	431.9	439.3
42.5°	334.4	339.0	345.1	353.2	362.6	372.0	381.5	390.9	401.0	411.0	418.5
45°	316.2	320.2	326.3	333.7	343.1	351.9	361.3	370.0	380.1	389.5	396.9
47.5°	297.4	301.4	306.1	313.5	322.9	332.3	341.8	350.5	359.2	368.7	375.4
50°	279.2	283.2	288.6	295.3	304.1	312.9	320.9	328.9	337.8	346.5	352.5
52.5°	260.4	264.4	269.1	275.8	283.2	291.3	298.7	306.8	314.9	322.9	328.9
55°	241.5	244.2	248.2	254.3	262.4	270.5	277.8	285.2	292.7	299.4	305.4
57.5°	222.7	226.0	230.8	236.1	242.8	249.6	256.3	263.0	269.8	276.5	281.9
60°	203.8	206.6	209.9	214.6	221.3	227.4	234.1	240.2	246.2	252.3	257.0
62.5°	184.3	187.0	190.4	195.1	200.5	205.8	211.9	217.3	222.7	228.0	232.8
65°	164.1	166.8	170.2	174.2	178.9	183.7	189.0	194.4	198.5	202.5	207.2
67.5°	143.3	146.0	149.4	152.7	156.7	161.5	166.2	170.8	174.9	178.9	182.3
70°	123.1	125.1	128.5	131.2	134.6	137.9	141.9	146.0	148.7	152.0	156.1
72.5°	103.6	105.6	108.3	111.0	113.0	115.7	119.7	123.1	126.5	130.6	132.6
75°	84.7	86.1	88.1	90.2	92.2	94.2	96.9	99.6	102.3	104.3	107.0
77.5°	65.9	67.3	69.3	70.6	72.0	73.4	75.4	77.4	79.4	80.7	83.5
80°	48.5	49.8	51.1	52.5	53.8	55.2	55.8	56.5	59.2	61.2	62.6
82.5°	33.0	33.6	34.3	35.6	36.4	37.0	37.6	37.6	39.0	40.4	42.4
85°	18.8	19.5	20.2	20.2	20.2	20.2	20.8	21.5	22.2	23.5	24.9
87.5°	7.4	7.4	8.1	8.1	8.1	8.1	8.1	8.1	8.7	10.1	10.7
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: P735579

CATALOG NUMBER: 4APN6-19-B2750-W2D-CP250-3000K

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7
2.5°	598.1	598.8	600.1	600.8	601.4	601.4	602.2	602.8	601.4	600.1	599.4
5°	601.4	602.2	604.2	606.2	607.5	608.9	608.2	607.5	606.2	604.2	602.8
7.5°	602.2	604.2	606.2	608.9	610.9	613.5	612.2	610.9	608.2	605.5	603.4
10°	600.1	602.8	606.2	609.5	611.5	613.5	612.2	610.9	608.2	604.8	602.2
12.5°	597.4	600.8	604.8	608.2	610.2	612.9	610.9	608.9	605.5	602.2	598.8
15°	591.3	595.4	600.1	604.2	607.5	610.2	608.2	606.8	602.8	598.1	593.3
17.5°	584.0	589.3	594.1	598.8	601.4	604.2	602.8	601.4	596.7	591.3	586.0
20°	575.2	580.6	585.3	590.0	593.3	596.1	594.1	592.1	587.3	582.6	577.2
22.5°	564.4	569.8	575.2	579.9	583.3	586.0	583.3	579.9	575.2	570.5	565.1
25°	551.0	557.1	563.1	567.8	569.8	572.5	569.8	567.2	562.4	557.7	551.7
27.5°	537.5	543.6	549.6	554.3	556.3	559.1	556.3	553.7	549.0	544.2	538.2
30°	522.1	528.1	534.2	538.9	540.9	542.9	540.2	537.5	533.5	528.8	522.7
32.5°	504.6	510.6	515.3	520.1	522.7	525.4	522.7	520.7	516.0	510.0	503.9
35°	485.7	491.8	497.9	502.5	505.2	508.0	504.6	501.2	497.1	492.4	487.1
37.5°	464.9	471.6	478.3	483.7	485.7	488.4	485.7	482.3	478.3	473.6	467.6
40°	445.3	451.4	457.5	462.9	464.9	466.9	464.2	461.5	456.8	452.1	446.0
42.5°	425.2	431.2	436.6	441.3	443.3	446.0	443.3	440.0	436.6	432.6	427.2
45°	403.7	409.7	414.4	419.1	421.1	423.1	420.5	417.1	413.8	410.4	405.0
47.5°	381.5	386.9	391.6	396.2	397.6	399.6	396.9	394.9	391.6	388.2	383.5
50°	358.6	364.0	368.7	372.7	374.0	376.0	373.4	370.7	368.0	365.3	361.3
52.5°	335.0	339.8	344.5	348.5	349.9	351.2	348.5	345.8	343.1	340.4	336.4
55°	310.8	315.5	320.2	323.6	324.9	326.3	323.6	321.6	318.9	316.9	312.9
57.5°	286.6	291.3	295.3	298.7	300.0	301.4	298.7	296.0	294.0	291.9	288.6
60°	261.7	266.4	269.8	272.5	273.8	274.5	271.8	269.8	268.4	267.1	263.8
62.5°	237.5	240.8	244.2	246.2	247.6	248.2	246.2	244.8	243.6	242.2	239.5
65°	211.9	215.9	218.7	220.7	221.3	222.0	220.0	218.7	217.3	215.9	213.9
67.5°	186.4	189.7	191.7	193.7	194.4	194.4	194.4	193.7	192.4	190.4	188.4
70°	160.8	163.5	165.5	166.8	167.5	167.5	166.2	164.8	164.8	164.1	162.8
72.5°	134.6	136.6	137.9	139.3	139.3	139.3	139.3	139.9	139.3	137.9	135.9
75°	109.6	111.7	113.0	113.7	113.7	113.7	113.7	114.4	113.7	113.0	111.7
77.5°	86.1	87.5	88.1	88.8	88.8	88.8	89.5	90.2	89.5	88.8	88.1
80°	63.9	64.6	65.3	65.9	65.3	65.3	65.9	67.3	66.6	65.9	65.3
82.5°	43.7	44.4	45.1	45.1	45.7	46.5	46.5	46.5	46.5	45.7	45.1
85°	26.3	26.9	26.9	26.9	26.9	26.9	27.6	28.3	28.3	27.6	27.6
87.5°	12.1	12.8	12.1	11.5	10.7	10.7	12.1	13.5	13.5	12.8	12.8
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: P735579

CATALOG NUMBER: 4APN6-19-B2750-W2D-CP250-3000K

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	594.7	594.7	594.7	594.7
2.5°	600.1	599.4	596.1	592.7
5°	602.2	600.1	595.4	590.7
7.5°	602.2	599.4	592.7	586.6
10°	598.8	594.7	587.3	579.9
12.5°	594.7	590.0	581.2	573.2
15°	588.7	583.3	573.9	564.4
17.5°	579.9	573.2	563.8	553.7
20°	571.2	563.8	552.3	541.6
22.5°	559.1	552.3	540.2	528.8
25°	545.6	538.2	526.1	514.0
27.5°	531.5	522.7	510.6	498.5
30°	515.3	506.6	494.5	482.3
32.5°	497.9	489.8	477.7	464.9
35°	480.3	471.6	459.5	446.7
37.5°	460.9	452.8	440.7	428.5
40°	440.0	431.9	419.8	407.7
42.5°	420.5	413.0	401.0	389.5
45°	399.0	391.6	380.1	369.3
47.5°	376.8	369.3	358.6	347.9
50°	355.2	347.9	337.8	327.7
52.5°	331.0	324.9	315.5	306.1
55°	307.5	301.4	291.9	283.2
57.5°	283.9	278.5	269.8	261.7
60°	259.0	253.7	246.9	239.5
62.5°	235.5	230.8	224.0	217.3
65°	210.6	206.6	200.5	194.4
67.5°	185.0	181.7	176.3	170.8
70°	159.5	155.4	151.4	146.7
72.5°	133.9	131.8	127.8	123.8
75°	109.6	107.6	104.3	100.9
77.5°	86.8	84.7	82.1	79.4
80°	63.9	62.6	60.6	58.5
82.5°	44.4	43.1	41.7	39.7
85°	26.9	25.6	24.2	22.9
87.5°	12.1	11.5	10.1	9.5
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)