

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: P

Luminaire Tested: **4APN-X-30L935-UNV-NP**

Issue Date: 06/06/2024



Test Information

Test Method: LM-79-08
Report Number: P
Test Lab: INNOVATION CENTER(G2)
Issue Date: 06/06/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4APN-X-30L935-UNV-NP
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture EXAM Light w/ Nature Pattern Lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

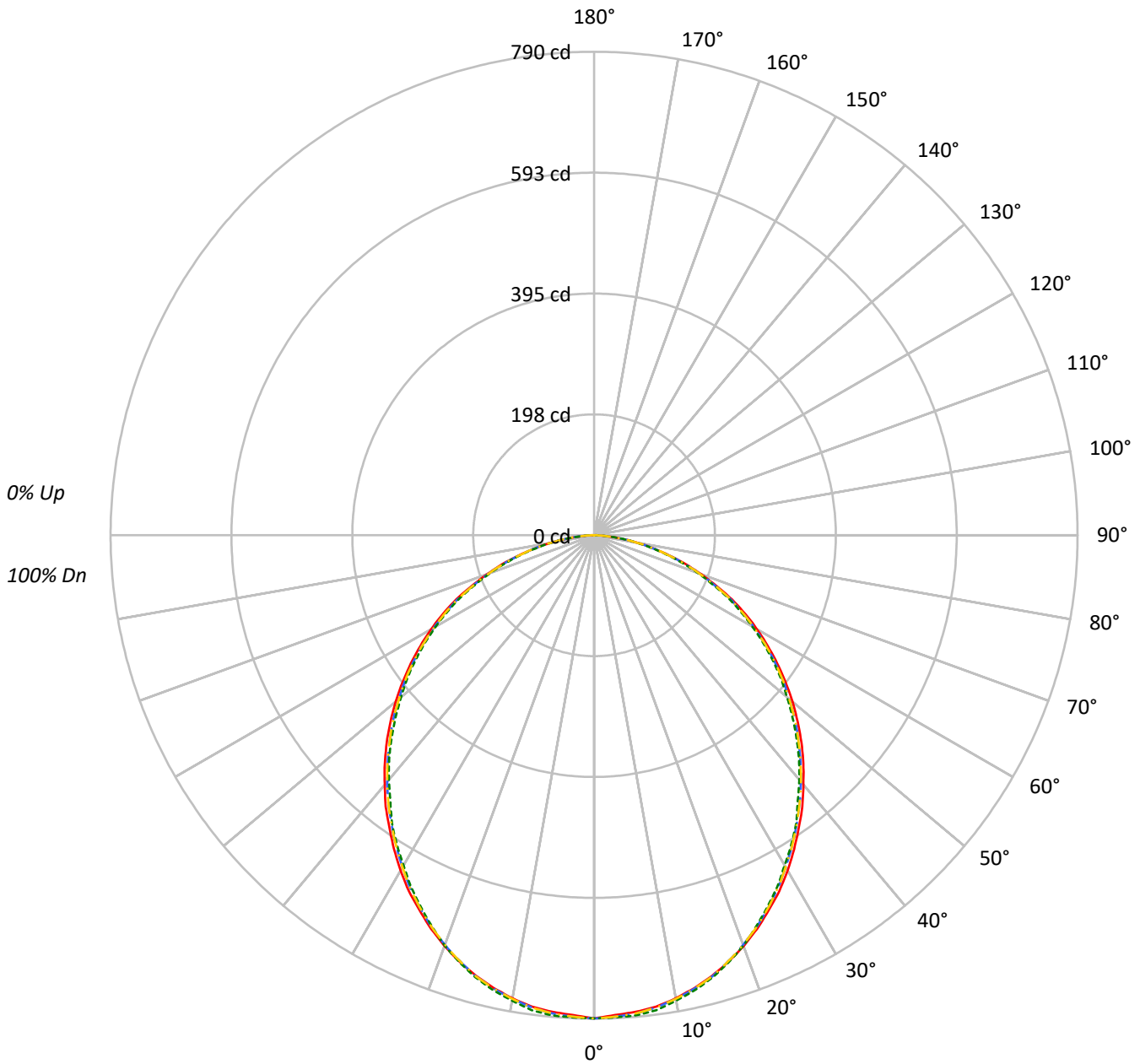
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2054.0 lumens
Efficiency: N/A
Efficacy: 63.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.5
Input Voltage (V): 120
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: P
CATALOG NUMBER: 4APN-X-30L935-UNV-NP

Luminous Intensity Polar Plot



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



TEST NUMBER: P
 CATALOG NUMBER: 4APN-X-30L935-UNV-NP

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	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	73	73	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	62	62	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	53	53	53	51
5	76	64	55	48	74	63	54	48	60	53	47	59	52	47	57	51	46	46	46	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	41	41	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	33	33	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	7284	7284	7284	7284
5°	7241	7294	7241	7294
10°	7198	7234	7198	7234
15°	7118	7145	7118	7145
20°	7013	7004	7013	7004
25°	6879	6820	6879	6820
30°	6737	6634	6737	6634
35°	6569	6482	6569	6482
40°	6409	6281	6409	6281
45°	6251	6100	6251	6100
50°	6074	5908	6074	5908
55°	5878	5736	5878	5736
60°	5674	5514	5674	5514
65°	5429	5261	5429	5261
70°	5020	4864	5020	4864
75°	4534	4399	4534	4399
80°	3895	3794	3895	3794
85°	2953	2953	2953	2953



TEST NUMBER: P
 CATALOG NUMBER: 4APN-X-30L935-UNV-NP

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	3.6
10°-20°	210.4	10.2
20°-30°	310.1	15.1
30°-40°	362.1	17.6
40°-50°	365.0	17.8
50°-60°	322.6	15.7
60°-70°	241.3	11.7
70°-80°	133.7	6.5
80°-90°	34.3	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°	595.1	29.0
0°-40°	957.1	46.6
0°-60°	1644.8	80.1
0°-90°	2054.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2054.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	790	790	790	790	790	
5°	782	788	782	788	782	74
15°	745	748	745	748	745	210
25°	676	670	676	670	676	311
35°	583	576	583	576	583	365
45°	479	468	479	468	479	369
55°	365	357	365	357	365	327
65°	249	241	249	241	249	245
75°	127	123	127	123	127	135
85°	28	28	28	28	28	34
90°	0	0	0	0	0	



TEST NUMBER: P
 CATALOG NUMBER: 4APN-X-30L935-UNV-NP

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5
2.5°	784.6	788.5	792.4	791.4	788.5	786.6	787.6	787.6	788.5	788.5	788.5
5°	781.8	785.6	788.5	787.6	784.6	783.7	783.7	783.7	785.6	787.6	785.6
7.5°	777.0	779.8	782.8	781.8	778.9	777.9	777.9	778.9	780.8	782.8	780.8
10°	768.3	772.2	775.0	773.1	770.2	768.3	768.3	768.3	770.2	772.2	770.2
12.5°	757.7	760.6	763.4	762.5	759.6	757.7	757.7	757.7	759.6	761.6	759.6
15°	745.2	748.0	751.0	750.0	747.1	745.2	745.2	745.2	747.1	748.0	747.1
17.5°	730.7	733.5	736.5	734.6	730.7	728.7	728.7	728.7	730.7	731.6	730.7
20°	714.3	717.2	719.2	717.2	713.4	711.4	710.4	710.4	712.3	713.4	712.3
22.5°	696.0	698.0	699.8	698.0	694.1	692.1	691.1	690.2	691.1	692.1	691.1
25°	675.7	677.7	679.6	677.7	673.8	670.9	669.9	669.0	669.9	669.9	669.9
27.5°	655.5	656.5	658.4	655.5	651.7	648.7	647.8	646.8	647.8	647.8	647.8
30°	632.4	633.3	635.3	632.4	627.5	624.7	623.6	622.7	622.7	622.7	622.7
32.5°	608.2	610.2	612.1	608.2	603.4	600.6	599.6	598.7	599.6	599.6	599.6
35°	583.2	584.2	586.1	583.2	578.4	575.5	573.6	572.6	574.5	575.5	574.5
37.5°	559.1	560.0	561.0	558.2	553.3	550.4	548.5	547.6	546.6	546.6	546.6
40°	532.1	533.1	535.0	532.1	527.3	524.4	522.5	521.5	521.5	521.5	521.5
42.5°	506.1	507.0	508.0	505.2	500.3	497.4	495.5	494.5	495.5	495.5	495.5
45°	479.1	479.1	480.1	477.1	473.3	470.4	468.5	467.5	467.5	467.5	467.5
47.5°	451.1	452.1	453.1	450.2	446.3	443.4	441.5	439.6	439.6	439.6	439.6
50°	423.2	423.2	424.1	421.3	417.4	414.5	413.5	412.6	411.6	411.6	411.6
52.5°	394.2	395.3	396.2	393.3	390.4	387.5	385.6	384.7	384.7	384.7	384.7
55°	365.4	365.4	366.3	364.4	361.5	358.6	356.6	355.7	356.6	356.6	356.6
57.5°	336.4	337.4	338.4	335.4	332.6	329.7	328.7	327.8	327.8	327.8	327.8
60°	307.5	307.5	308.5	306.6	303.6	300.8	299.8	298.8	298.8	298.8	298.8
62.5°	278.6	278.6	279.6	277.6	274.8	271.8	270.9	269.9	269.9	269.9	269.9
65°	248.7	248.7	248.7	246.8	244.9	243.9	242.9	241.9	241.0	241.0	241.0
67.5°	215.9	215.9	216.9	215.0	213.1	212.1	211.1	210.1	209.2	209.2	209.2
70°	186.1	186.1	187.0	186.1	184.1	183.1	182.2	181.3	180.3	180.3	180.3
72.5°	157.1	157.1	157.1	156.2	155.2	154.3	153.2	152.3	151.3	151.3	151.3
75°	127.2	127.2	128.3	127.2	126.3	125.3	124.4	124.4	123.4	123.4	123.4
77.5°	99.3	100.2	101.2	100.2	99.3	98.3	97.4	97.4	96.4	96.4	96.4
80°	73.3	74.2	75.2	74.2	73.3	72.3	71.4	71.4	71.4	71.4	71.4
82.5°	49.1	50.2	51.1	50.2	49.1	49.1	48.2	48.2	48.2	48.2	48.2
85°	27.9	29.0	29.9	29.9	29.0	29.0	27.9	27.9	27.9	27.9	27.9
87.5°	10.6	11.5	12.5	12.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
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: P
 CATALOG NUMBER: 4APN-X-30L935-UNV-NP

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5
2.5°	787.6	787.6	786.6	788.5	791.4	792.4	788.5	784.6	788.5	792.4	791.4
5°	783.7	783.7	783.7	784.6	787.6	788.5	785.6	781.8	785.6	788.5	787.6
7.5°	778.9	777.9	777.9	778.9	781.8	782.8	779.8	777.0	779.8	782.8	781.8
10°	768.3	768.3	768.3	770.2	773.1	775.0	772.2	768.3	772.2	775.0	773.1
12.5°	757.7	757.7	757.7	759.6	762.5	763.4	760.6	757.7	760.6	763.4	762.5
15°	745.2	745.2	745.2	747.1	750.0	751.0	748.0	745.2	748.0	751.0	750.0
17.5°	728.7	728.7	728.7	730.7	734.6	736.5	733.5	730.7	733.5	736.5	734.6
20°	710.4	710.4	711.4	713.4	717.2	719.2	717.2	714.3	717.2	719.2	717.2
22.5°	690.2	691.1	692.1	694.1	698.0	699.8	698.0	696.0	698.0	699.8	698.0
25°	669.0	669.9	670.9	673.8	677.7	679.6	677.7	675.7	677.7	679.6	677.7
27.5°	646.8	647.8	648.7	651.7	655.5	658.4	656.5	655.5	656.5	658.4	655.5
30°	622.7	623.6	624.7	627.5	632.4	635.3	633.3	632.4	633.3	635.3	632.4
32.5°	598.7	599.6	600.6	603.4	608.2	612.1	610.2	608.2	610.2	612.1	608.2
35°	572.6	573.6	575.5	578.4	583.2	586.1	584.2	583.2	584.2	586.1	583.2
37.5°	547.6	548.5	550.4	553.3	558.2	561.0	560.0	559.1	560.0	561.0	558.2
40°	521.5	522.5	524.4	527.3	532.1	535.0	533.1	532.1	533.1	535.0	532.1
42.5°	494.5	495.5	497.4	500.3	505.2	508.0	507.0	506.1	507.0	508.0	505.2
45°	467.5	468.5	470.4	473.3	477.1	480.1	479.1	479.1	479.1	480.1	477.1
47.5°	439.6	441.5	443.4	446.3	450.2	453.1	452.1	451.1	452.1	453.1	450.2
50°	412.6	413.5	414.5	417.4	421.3	424.1	423.2	423.2	423.2	424.1	421.3
52.5°	384.7	385.6	387.5	390.4	393.3	396.2	395.3	394.2	395.3	396.2	393.3
55°	355.7	356.6	358.6	361.5	364.4	366.3	365.4	365.4	365.4	366.3	364.4
57.5°	327.8	328.7	329.7	332.6	335.4	338.4	337.4	336.4	337.4	338.4	335.4
60°	298.8	299.8	300.8	303.6	306.6	308.5	307.5	307.5	307.5	308.5	306.6
62.5°	269.9	270.9	271.8	274.8	277.6	279.6	278.6	278.6	278.6	279.6	277.6
65°	241.9	242.9	243.9	244.9	246.8	248.7	248.7	248.7	248.7	248.7	246.8
67.5°	210.1	211.1	212.1	213.1	215.0	216.9	215.9	215.9	215.9	216.9	215.0
70°	181.3	182.2	183.1	184.1	186.1	187.0	186.1	186.1	186.1	187.0	186.1
72.5°	152.3	153.2	154.3	155.2	156.2	157.1	157.1	157.1	157.1	157.1	156.2
75°	124.4	124.4	125.3	126.3	127.2	128.3	127.2	127.2	127.2	128.3	127.2
77.5°	97.4	97.4	98.3	99.3	100.2	101.2	100.2	99.3	100.2	101.2	100.2
80°	71.4	71.4	72.3	73.3	74.2	75.2	74.2	73.3	74.2	75.2	74.2
82.5°	48.2	48.2	49.1	49.1	50.2	51.1	50.2	49.1	50.2	51.1	50.2
85°	27.9	27.9	29.0	29.0	29.9	29.9	29.0	27.9	29.0	29.9	29.9
87.5°	11.5	11.5	11.5	11.5	12.5	12.5	11.5	10.6	11.5	12.5	12.5
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: P
 CATALOG NUMBER: 4APN-X-30L935-UNV-NP

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5	789.5
2.5°	788.5	786.6	787.6	787.6	788.5	788.5	788.5	787.6	787.6	786.6	788.5
5°	784.6	783.7	783.7	783.7	785.6	787.6	785.6	783.7	783.7	783.7	784.6
7.5°	778.9	777.9	777.9	778.9	780.8	782.8	780.8	778.9	777.9	777.9	778.9
10°	770.2	768.3	768.3	768.3	770.2	772.2	770.2	768.3	768.3	768.3	770.2
12.5°	759.6	757.7	757.7	757.7	759.6	761.6	759.6	757.7	757.7	757.7	759.6
15°	747.1	745.2	745.2	745.2	747.1	748.0	747.1	745.2	745.2	745.2	747.1
17.5°	730.7	728.7	728.7	728.7	730.7	731.6	730.7	728.7	728.7	728.7	730.7
20°	713.4	711.4	710.4	710.4	712.3	713.4	712.3	710.4	710.4	711.4	713.4
22.5°	694.1	692.1	691.1	690.2	691.1	692.1	691.1	690.2	691.1	692.1	694.1
25°	673.8	670.9	669.9	669.0	669.9	669.9	669.9	669.0	669.9	670.9	673.8
27.5°	651.7	648.7	647.8	646.8	647.8	647.8	647.8	646.8	647.8	648.7	651.7
30°	627.5	624.7	623.6	622.7	622.7	622.7	622.7	622.7	623.6	624.7	627.5
32.5°	603.4	600.6	599.6	598.7	599.6	599.6	599.6	598.7	599.6	600.6	603.4
35°	578.4	575.5	573.6	572.6	574.5	575.5	574.5	572.6	573.6	575.5	578.4
37.5°	553.3	550.4	548.5	547.6	546.6	546.6	546.6	547.6	548.5	550.4	553.3
40°	527.3	524.4	522.5	521.5	521.5	521.5	521.5	521.5	522.5	524.4	527.3
42.5°	500.3	497.4	495.5	494.5	495.5	495.5	495.5	494.5	495.5	497.4	500.3
45°	473.3	470.4	468.5	467.5	467.5	467.5	467.5	467.5	468.5	470.4	473.3
47.5°	446.3	443.4	441.5	439.6	439.6	439.6	439.6	439.6	441.5	443.4	446.3
50°	417.4	414.5	413.5	412.6	411.6	411.6	411.6	412.6	413.5	414.5	417.4
52.5°	390.4	387.5	385.6	384.7	384.7	384.7	384.7	384.7	385.6	387.5	390.4
55°	361.5	358.6	356.6	355.7	356.6	356.6	356.6	355.7	356.6	358.6	361.5
57.5°	332.6	329.7	328.7	327.8	327.8	327.8	327.8	327.8	328.7	329.7	332.6
60°	303.6	300.8	299.8	298.8	298.8	298.8	298.8	298.8	299.8	300.8	303.6
62.5°	274.8	271.8	270.9	269.9	269.9	269.9	269.9	269.9	270.9	271.8	274.8
65°	244.9	243.9	242.9	241.9	241.0	241.0	241.0	241.9	242.9	243.9	244.9
67.5°	213.1	212.1	211.1	210.1	209.2	209.2	209.2	210.1	211.1	212.1	213.1
70°	184.1	183.1	182.2	181.3	180.3	180.3	180.3	181.3	182.2	183.1	184.1
72.5°	155.2	154.3	153.2	152.3	151.3	151.3	151.3	152.3	153.2	154.3	155.2
75°	126.3	125.3	124.4	124.4	123.4	123.4	123.4	124.4	124.4	125.3	126.3
77.5°	99.3	98.3	97.4	97.4	96.4	96.4	96.4	97.4	97.4	98.3	99.3
80°	73.3	72.3	71.4	71.4	71.4	71.4	71.4	71.4	71.4	72.3	73.3
82.5°	49.1	49.1	48.2	48.2	48.2	48.2	48.2	48.2	48.2	49.1	49.1
85°	29.0	29.0	27.9	27.9	27.9	27.9	27.9	27.9	27.9	29.0	29.0
87.5°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
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: P
 CATALOG NUMBER: 4APN-X-30L935-UNV-NP

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	789.5	789.5	789.5	789.5
2.5°	791.4	792.4	788.5	784.6
5°	787.6	788.5	785.6	781.8
7.5°	781.8	782.8	779.8	777.0
10°	773.1	775.0	772.2	768.3
12.5°	762.5	763.4	760.6	757.7
15°	750.0	751.0	748.0	745.2
17.5°	734.6	736.5	733.5	730.7
20°	717.2	719.2	717.2	714.3
22.5°	698.0	699.8	698.0	696.0
25°	677.7	679.6	677.7	675.7
27.5°	655.5	658.4	656.5	655.5
30°	632.4	635.3	633.3	632.4
32.5°	608.2	612.1	610.2	608.2
35°	583.2	586.1	584.2	583.2
37.5°	558.2	561.0	560.0	559.1
40°	532.1	535.0	533.1	532.1
42.5°	505.2	508.0	507.0	506.1
45°	477.1	480.1	479.1	479.1
47.5°	450.2	453.1	452.1	451.1
50°	421.3	424.1	423.2	423.2
52.5°	393.3	396.2	395.3	394.2
55°	364.4	366.3	365.4	365.4
57.5°	335.4	338.4	337.4	336.4
60°	306.6	308.5	307.5	307.5
62.5°	277.6	279.6	278.6	278.6
65°	246.8	248.7	248.7	248.7
67.5°	215.0	216.9	215.9	215.9
70°	186.1	187.0	186.1	186.1
72.5°	156.2	157.1	157.1	157.1
75°	127.2	128.3	127.2	127.2
77.5°	100.2	101.2	100.2	99.3
80°	74.2	75.2	74.2	73.3
82.5°	50.2	51.1	50.2	49.1
85°	29.9	29.9	29.0	27.9
87.5°	12.5	12.5	11.5	10.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)