

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: P709070

Luminaire Tested: **4APN-X-26L835-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709070
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4APN-X-26L835-UNV
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture EXAM Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

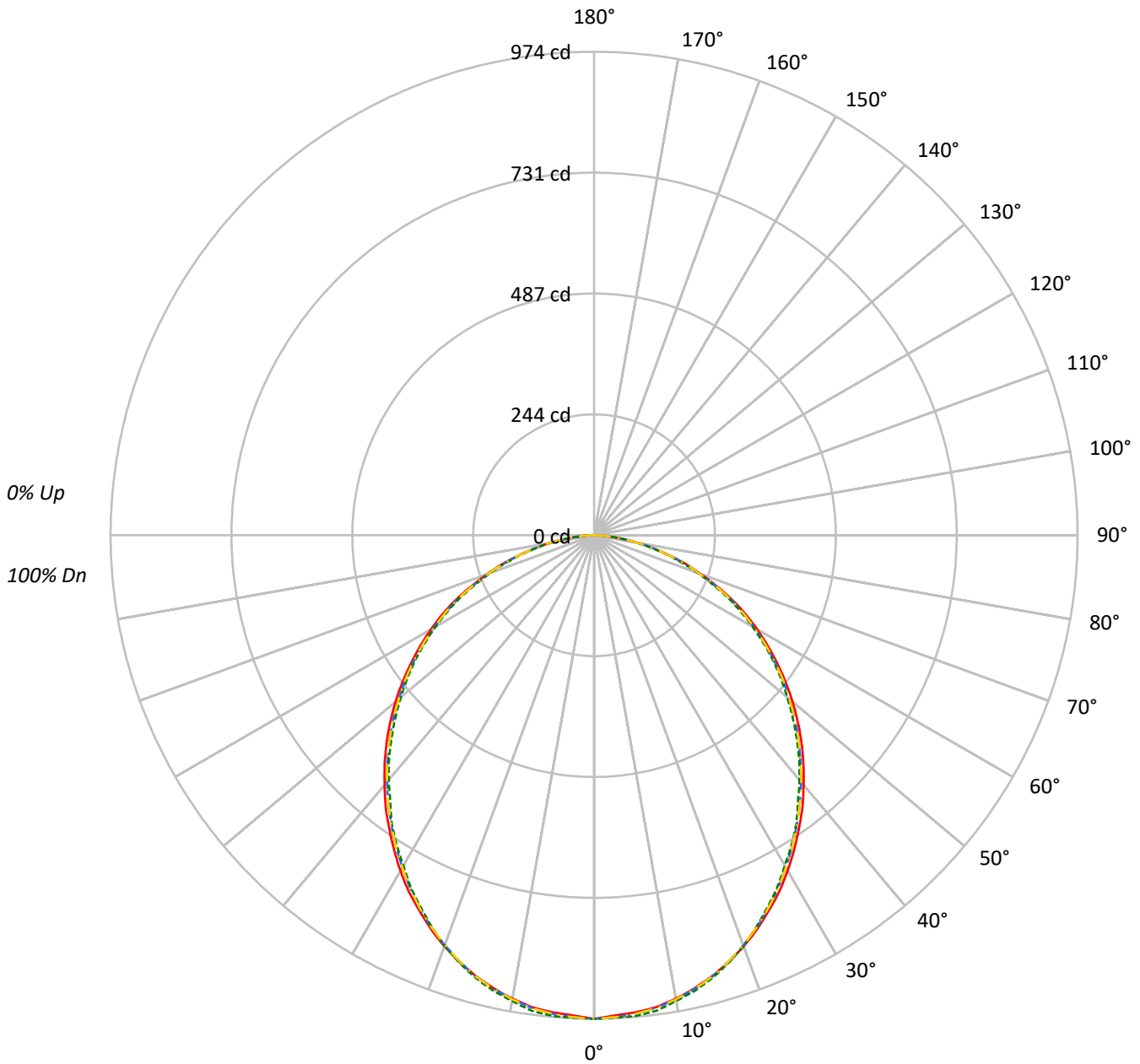
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2534.6 lumens
Efficiency: N/A
Efficacy: 89.9 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): 28.2
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

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Luminous Intensity Polar Plot



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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	8988	8988	8988	8988
5°	8935	9000	8935	9000
10°	8881	8926	8881	8926
15°	8783	8817	8783	8817
20°	8654	8642	8654	8642
25°	8488	8416	8488	8416
30°	8313	8186	8313	8186
35°	8106	7998	8106	7998
40°	7908	7750	7908	7750
45°	7714	7527	7714	7527
50°	7495	7290	7495	7290
55°	7251	7079	7251	7079
60°	7003	6803	7003	6803
65°	6700	6493	6700	6493
70°	6194	5999	6194	5999
75°	5597	5429	5597	5429
80°	4803	4676	4803	4676
85°	3652	3652	3652	3652



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	3.6
10°-20°	259.7	10.2
20°-30°	382.7	15.1
30°-40°	446.8	17.6
40°-50°	450.4	17.8
50°-60°	398.1	15.7
60°-70°	297.7	11.7
70°-80°	165.0	6.5
80°-90°	42.3	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°	734.3	29.0
0°-40°	1181.1	46.6
0°-60°	2029.6	80.1
0°-90°	2534.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2534.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	974	974	974	974	974	
5°	965	972	965	972	965	92
15°	920	923	920	923	920	259
25°	834	827	834	827	834	384
35°	720	710	720	710	720	451
45°	591	577	591	577	591	456
55°	451	440	451	440	451	403
65°	307	297	307	297	307	302
75°	157	152	157	152	157	167
85°	34	34	34	34	34	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2
2.5°	968.3	973.0	977.8	976.6	973.0	970.6	971.8	971.8	973.0	973.0	973.0
5°	964.7	969.5	973.0	971.8	968.3	967.1	967.1	967.1	969.5	971.8	969.5
7.5°	958.7	962.3	965.9	964.7	961.1	959.9	959.9	961.1	963.5	965.9	963.5
10°	948.0	952.8	956.4	954.0	950.4	948.0	948.0	948.0	950.4	952.8	950.4
12.5°	935.0	938.5	942.1	940.9	937.3	935.0	935.0	935.0	937.3	939.7	937.3
15°	919.5	923.1	926.6	925.4	921.9	919.5	919.5	919.5	921.9	923.1	921.9
17.5°	901.7	905.2	908.8	906.4	901.7	899.3	899.3	899.3	901.7	902.8	901.7
20°	881.4	885.0	887.4	885.0	880.2	877.9	876.7	876.7	879.0	880.2	879.0
22.5°	858.8	861.2	863.6	861.2	856.4	854.1	852.9	851.7	852.9	854.1	852.9
25°	833.8	836.2	838.6	836.2	831.5	827.9	826.7	825.5	826.7	826.7	826.7
27.5°	808.9	810.1	812.4	808.9	804.1	800.5	799.4	798.2	799.4	799.4	799.4
30°	780.3	781.5	783.9	780.3	774.4	770.8	769.6	768.4	768.4	768.4	768.4
32.5°	750.6	753.0	755.3	750.6	744.6	741.1	739.9	738.7	739.9	739.9	739.9
35°	719.7	720.8	723.2	719.7	713.7	710.1	707.8	706.6	708.9	710.1	708.9
37.5°	689.9	691.1	692.3	688.7	682.8	679.2	676.8	675.6	674.5	674.5	674.5
40°	656.6	657.8	660.2	656.6	650.7	647.1	644.7	643.5	643.5	643.5	643.5
42.5°	624.5	625.7	626.9	623.3	617.4	613.8	611.4	610.2	611.4	611.4	611.4
45°	591.2	591.2	592.4	588.8	584.1	580.5	578.1	576.9	576.9	576.9	576.9
47.5°	556.7	557.9	559.1	555.5	550.7	547.2	544.8	542.4	542.4	542.4	542.4
50°	522.2	522.2	523.4	519.8	515.1	511.5	510.3	509.1	507.9	507.9	507.9
52.5°	486.5	487.7	488.9	485.3	481.8	478.2	475.8	474.6	474.6	474.6	474.6
55°	450.8	450.8	452.0	449.6	446.1	442.5	440.1	438.9	440.1	440.1	440.1
57.5°	415.1	416.3	417.5	414.0	410.4	406.8	405.6	404.4	404.4	404.4	404.4
60°	379.5	379.5	380.6	378.3	374.7	371.1	369.9	368.7	368.7	368.7	368.7
62.5°	343.8	343.8	345.0	342.6	339.0	335.4	334.3	333.1	333.1	333.1	333.1
65°	306.9	306.9	306.9	304.5	302.1	300.9	299.8	298.6	297.4	297.4	297.4
67.5°	266.5	266.5	267.6	265.3	262.9	261.7	260.5	259.3	258.1	258.1	258.1
70°	229.6	229.6	230.8	229.6	227.2	226.0	224.8	223.6	222.4	222.4	222.4
72.5°	193.9	193.9	193.9	192.7	191.5	190.3	189.1	187.9	186.8	186.8	186.8
75°	157.0	157.0	158.2	157.0	155.8	154.6	153.4	153.4	152.3	152.3	152.3
77.5°	122.5	123.7	124.9	123.7	122.5	121.3	120.1	120.1	119.0	119.0	119.0
80°	90.4	91.6	92.8	91.6	90.4	89.2	88.0	88.0	88.0	88.0	88.0
82.5°	60.7	61.9	63.0	61.9	60.7	60.7	59.5	59.5	59.5	59.5	59.5
85°	34.5	35.7	36.9	36.9	35.7	35.7	34.5	34.5	34.5	34.5	34.5
87.5°	13.1	14.3	15.5	15.5	14.3	14.3	14.3	14.3	14.3	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2
2.5°	971.8	971.8	970.6	973.0	976.6	977.8	973.0	968.3	973.0	977.8	976.6
5°	967.1	967.1	967.1	968.3	971.8	973.0	969.5	964.7	969.5	973.0	971.8
7.5°	961.1	959.9	959.9	961.1	964.7	965.9	962.3	958.7	962.3	965.9	964.7
10°	948.0	948.0	948.0	950.4	954.0	956.4	952.8	948.0	952.8	956.4	954.0
12.5°	935.0	935.0	935.0	937.3	940.9	942.1	938.5	935.0	938.5	942.1	940.9
15°	919.5	919.5	919.5	921.9	925.4	926.6	923.1	919.5	923.1	926.6	925.4
17.5°	899.3	899.3	899.3	901.7	906.4	908.8	905.2	901.7	905.2	908.8	906.4
20°	876.7	876.7	877.9	880.2	885.0	887.4	885.0	881.4	885.0	887.4	885.0
22.5°	851.7	852.9	854.1	856.4	861.2	863.6	861.2	858.8	861.2	863.6	861.2
25°	825.5	826.7	827.9	831.5	836.2	838.6	836.2	833.8	836.2	838.6	836.2
27.5°	798.2	799.4	800.5	804.1	808.9	812.4	810.1	808.9	810.1	812.4	808.9
30°	768.4	769.6	770.8	774.4	780.3	783.9	781.5	780.3	781.5	783.9	780.3
32.5°	738.7	739.9	741.1	744.6	750.6	755.3	753.0	750.6	753.0	755.3	750.6
35°	706.6	707.8	710.1	713.7	719.7	723.2	720.8	719.7	720.8	723.2	719.7
37.5°	675.6	676.8	679.2	682.8	688.7	692.3	691.1	689.9	691.1	692.3	688.7
40°	643.5	644.7	647.1	650.7	656.6	660.2	657.8	656.6	657.8	660.2	656.6
42.5°	610.2	611.4	613.8	617.4	623.3	626.9	625.7	624.5	625.7	626.9	623.3
45°	576.9	578.1	580.5	584.1	588.8	592.4	591.2	591.2	591.2	592.4	588.8
47.5°	542.4	544.8	547.2	550.7	555.5	559.1	557.9	556.7	557.9	559.1	555.5
50°	509.1	510.3	511.5	515.1	519.8	523.4	522.2	522.2	522.2	523.4	519.8
52.5°	474.6	475.8	478.2	481.8	485.3	488.9	487.7	486.5	487.7	488.9	485.3
55°	438.9	440.1	442.5	446.1	449.6	452.0	450.8	450.8	450.8	452.0	449.6
57.5°	404.4	405.6	406.8	410.4	414.0	417.5	416.3	415.1	416.3	417.5	414.0
60°	368.7	369.9	371.1	374.7	378.3	380.6	379.5	379.5	379.5	380.6	378.3
62.5°	333.1	334.3	335.4	339.0	342.6	345.0	343.8	343.8	343.8	345.0	342.6
65°	298.6	299.8	300.9	302.1	304.5	306.9	306.9	306.9	306.9	306.9	304.5
67.5°	259.3	260.5	261.7	262.9	265.3	267.6	266.5	266.5	266.5	267.6	265.3
70°	223.6	224.8	226.0	227.2	229.6	230.8	229.6	229.6	229.6	230.8	229.6
72.5°	187.9	189.1	190.3	191.5	192.7	193.9	193.9	193.9	193.9	193.9	192.7
75°	153.4	153.4	154.6	155.8	157.0	158.2	157.0	157.0	157.0	158.2	157.0
77.5°	120.1	120.1	121.3	122.5	123.7	124.9	123.7	122.5	123.7	124.9	123.7
80°	88.0	88.0	89.2	90.4	91.6	92.8	91.6	90.4	91.6	92.8	91.6
82.5°	59.5	59.5	60.7	60.7	61.9	63.0	61.9	60.7	61.9	63.0	61.9
85°	34.5	34.5	35.7	35.7	36.9	36.9	35.7	34.5	35.7	36.9	36.9
87.5°	14.3	14.3	14.3	14.3	15.5	15.5	14.3	13.1	14.3	15.5	15.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2
2.5°	973.0	970.6	971.8	971.8	973.0	973.0	973.0	971.8	971.8	970.6	973.0
5°	968.3	967.1	967.1	967.1	969.5	971.8	969.5	967.1	967.1	967.1	968.3
7.5°	961.1	959.9	959.9	961.1	963.5	965.9	963.5	961.1	959.9	959.9	961.1
10°	950.4	948.0	948.0	948.0	950.4	952.8	950.4	948.0	948.0	948.0	950.4
12.5°	937.3	935.0	935.0	935.0	937.3	939.7	937.3	935.0	935.0	935.0	937.3
15°	921.9	919.5	919.5	919.5	921.9	923.1	921.9	919.5	919.5	919.5	921.9
17.5°	901.7	899.3	899.3	899.3	901.7	902.8	901.7	899.3	899.3	899.3	901.7
20°	880.2	877.9	876.7	876.7	879.0	880.2	879.0	876.7	876.7	877.9	880.2
22.5°	856.4	854.1	852.9	851.7	852.9	854.1	852.9	851.7	852.9	854.1	856.4
25°	831.5	827.9	826.7	825.5	826.7	826.7	826.7	825.5	826.7	827.9	831.5
27.5°	804.1	800.5	799.4	798.2	799.4	799.4	799.4	798.2	799.4	800.5	804.1
30°	774.4	770.8	769.6	768.4	768.4	768.4	768.4	768.4	769.6	770.8	774.4
32.5°	744.6	741.1	739.9	738.7	739.9	739.9	739.9	738.7	739.9	741.1	744.6
35°	713.7	710.1	707.8	706.6	708.9	710.1	708.9	706.6	707.8	710.1	713.7
37.5°	682.8	679.2	676.8	675.6	674.5	674.5	674.5	675.6	676.8	679.2	682.8
40°	650.7	647.1	644.7	643.5	643.5	643.5	643.5	643.5	644.7	647.1	650.7
42.5°	617.4	613.8	611.4	610.2	611.4	611.4	611.4	610.2	611.4	613.8	617.4
45°	584.1	580.5	578.1	576.9	576.9	576.9	576.9	576.9	578.1	580.5	584.1
47.5°	550.7	547.2	544.8	542.4	542.4	542.4	542.4	542.4	544.8	547.2	550.7
50°	515.1	511.5	510.3	509.1	507.9	507.9	507.9	509.1	510.3	511.5	515.1
52.5°	481.8	478.2	475.8	474.6	474.6	474.6	474.6	474.6	475.8	478.2	481.8
55°	446.1	442.5	440.1	438.9	440.1	440.1	440.1	438.9	440.1	442.5	446.1
57.5°	410.4	406.8	405.6	404.4	404.4	404.4	404.4	404.4	405.6	406.8	410.4
60°	374.7	371.1	369.9	368.7	368.7	368.7	368.7	368.7	369.9	371.1	374.7
62.5°	339.0	335.4	334.3	333.1	333.1	333.1	333.1	333.1	334.3	335.4	339.0
65°	302.1	300.9	299.8	298.6	297.4	297.4	297.4	298.6	299.8	300.9	302.1
67.5°	262.9	261.7	260.5	259.3	258.1	258.1	258.1	259.3	260.5	261.7	262.9
70°	227.2	226.0	224.8	223.6	222.4	222.4	222.4	223.6	224.8	226.0	227.2
72.5°	191.5	190.3	189.1	187.9	186.8	186.8	186.8	187.9	189.1	190.3	191.5
75°	155.8	154.6	153.4	153.4	152.3	152.3	152.3	153.4	153.4	154.6	155.8
77.5°	122.5	121.3	120.1	120.1	119.0	119.0	119.0	120.1	120.1	121.3	122.5
80°	90.4	89.2	88.0	88.0	88.0	88.0	88.0	88.0	88.0	89.2	90.4
82.5°	60.7	60.7	59.5	59.5	59.5	59.5	59.5	59.5	59.5	60.7	60.7
85°	35.7	35.7	34.5	34.5	34.5	34.5	34.5	34.5	34.5	35.7	35.7
87.5°	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: 4APN-X-26L835-UNV

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	974.2	974.2	974.2	974.2
2.5°	976.6	977.8	973.0	968.3
5°	971.8	973.0	969.5	964.7
7.5°	964.7	965.9	962.3	958.7
10°	954.0	956.4	952.8	948.0
12.5°	940.9	942.1	938.5	935.0
15°	925.4	926.6	923.1	919.5
17.5°	906.4	908.8	905.2	901.7
20°	885.0	887.4	885.0	881.4
22.5°	861.2	863.6	861.2	858.8
25°	836.2	838.6	836.2	833.8
27.5°	808.9	812.4	810.1	808.9
30°	780.3	783.9	781.5	780.3
32.5°	750.6	755.3	753.0	750.6
35°	719.7	723.2	720.8	719.7
37.5°	688.7	692.3	691.1	689.9
40°	656.6	660.2	657.8	656.6
42.5°	623.3	626.9	625.7	624.5
45°	588.8	592.4	591.2	591.2
47.5°	555.5	559.1	557.9	556.7
50°	519.8	523.4	522.2	522.2
52.5°	485.3	488.9	487.7	486.5
55°	449.6	452.0	450.8	450.8
57.5°	414.0	417.5	416.3	415.1
60°	378.3	380.6	379.5	379.5
62.5°	342.6	345.0	343.8	343.8
65°	304.5	306.9	306.9	306.9
67.5°	265.3	267.6	266.5	266.5
70°	229.6	230.8	229.6	229.6
72.5°	192.7	193.9	193.9	193.9
75°	157.0	158.2	157.0	157.0
77.5°	123.7	124.9	123.7	122.5
80°	91.6	92.8	91.6	90.4
82.5°	61.9	63.0	61.9	60.7
85°	36.9	36.9	35.7	34.5
87.5°	15.5	15.5	14.3	13.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)