

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: McGRAW-EDISON

Report Number: P300889

Luminaire Tested: **GLNA-AF-09-LED-E1-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300889
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-09-LED-E1-SL4-7030
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48739.6 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

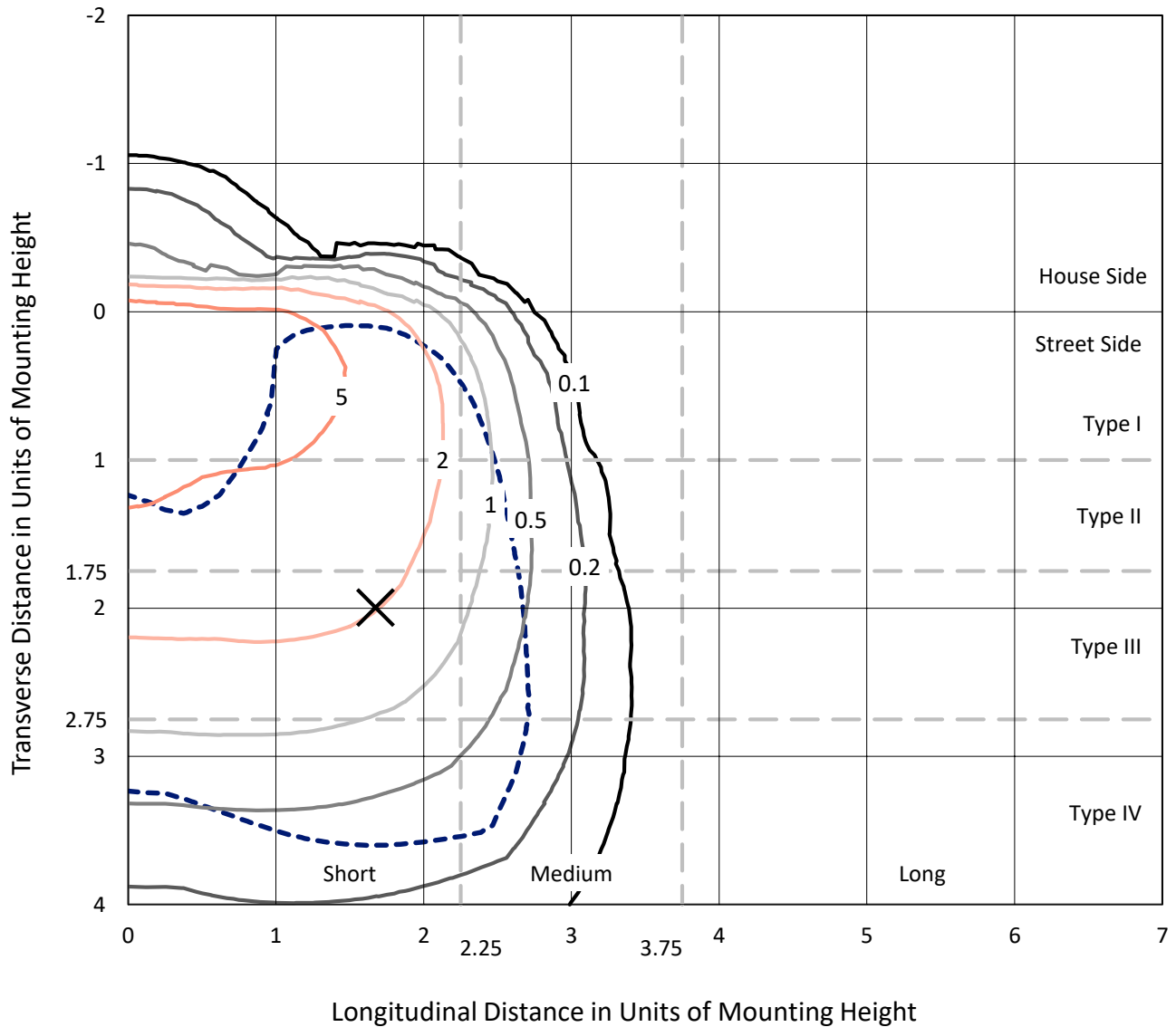
Input Watts (W): 501
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

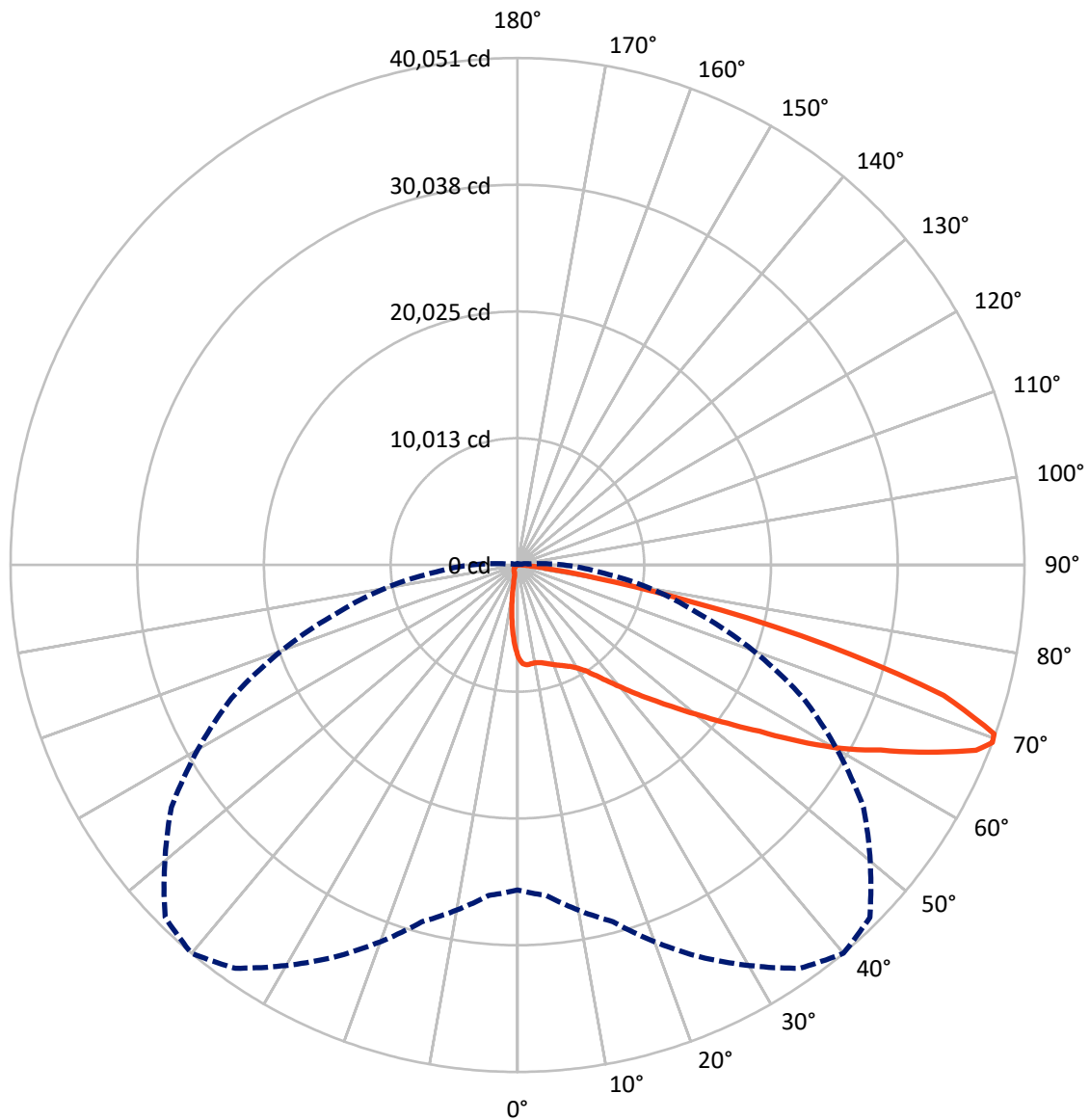
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.9 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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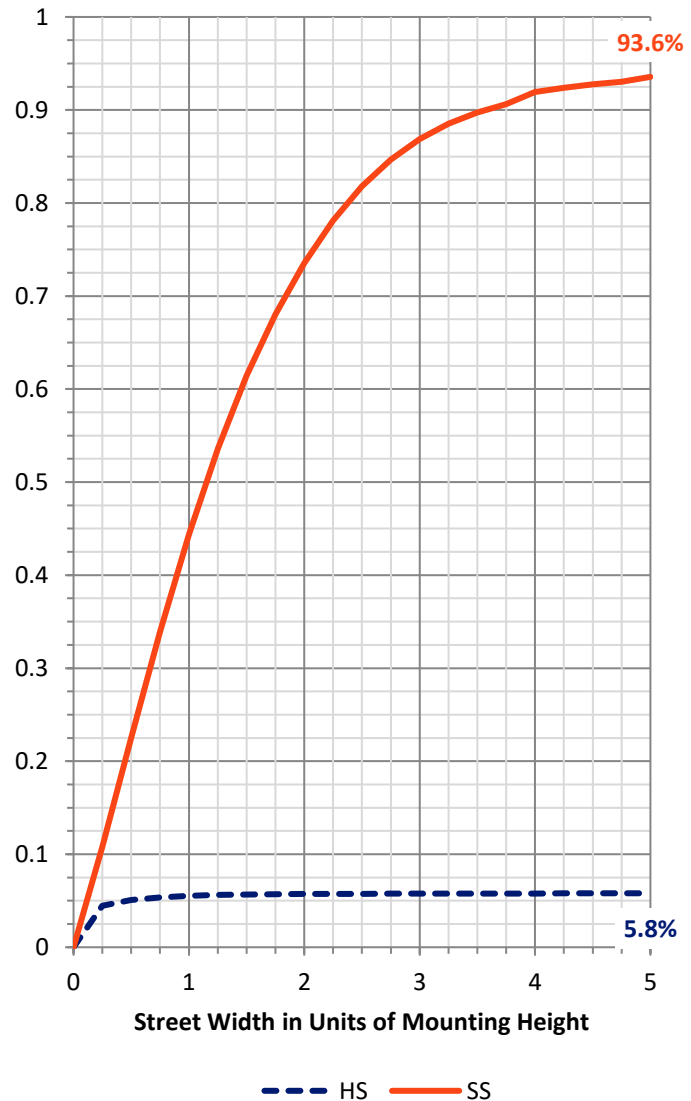
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2851.5	0.0	2851.5
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	45888.1	0.0	45888.1
	% Fixture	94.1	0.0	94.1
Total	Lumens	48739.6	0.0	48739.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	590.4	1.2
10°-20°	1452.0	3.0
20°-30°	2445.6	5.0
30°-40°	4003.5	8.2
40°-50°	6932.0	14.2
50°-60°	10918.5	22.4
60°-70°	14259.2	29.3
70°-80°	7344.1	15.1
80°-90°	794.4	1.6
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°-90°	48739.6	100.0
0°-180°	48739.6	100.0



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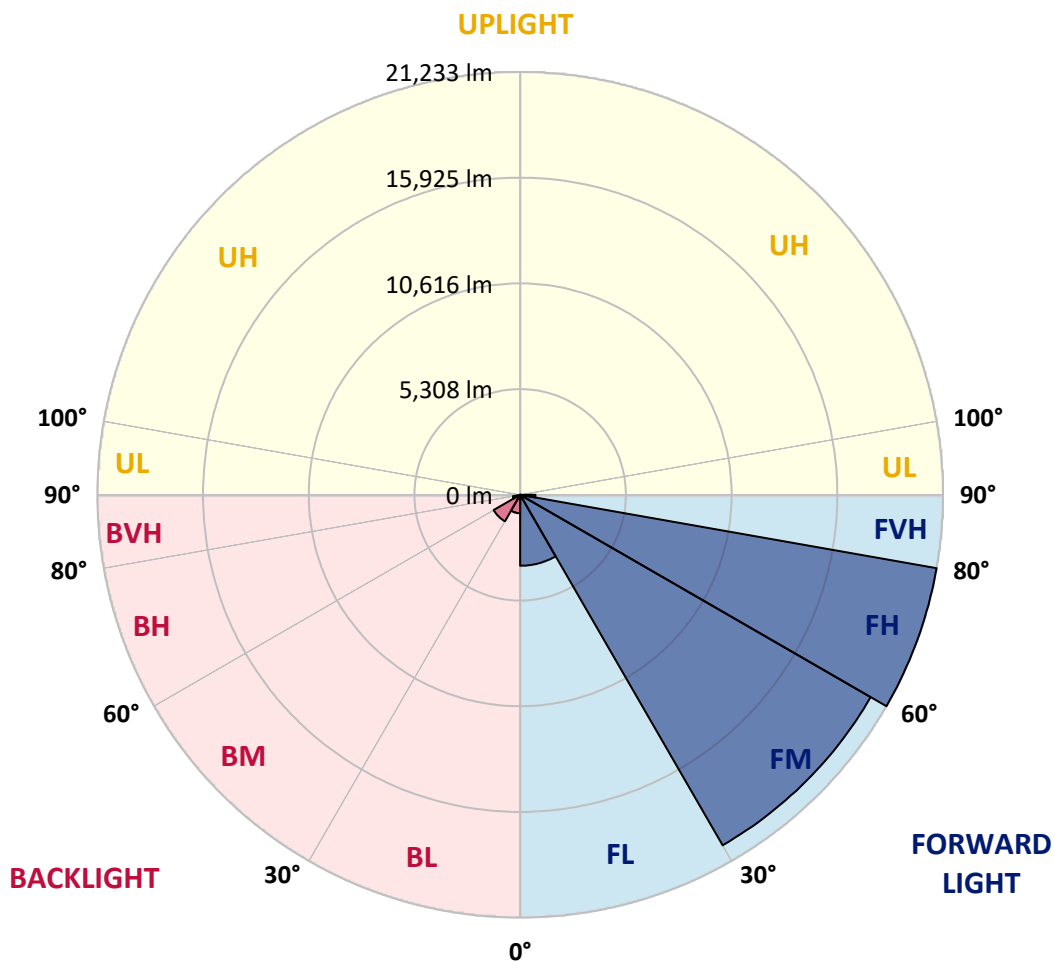
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3564.3	7.3			
FM	(30°-60°)	20321.4	41.7			
FH	(60°-80°)	21233.0	43.6			G5
FVH	(80°-90°)	769.5	1.6			G5
BL	(0°-30°)	923.7	1.9	B2/1000		
BM	(30°-60°)	1532.6	3.1	B2/2500		
BH	(60°-80°)	370.3	0.8	B1/500		G1/500
BVH	(80°-90°)	24.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0
2.5°	7995.6	7952.1	7926.0	7891.2	7847.7	7810.0	7795.5	7688.1	7586.6	7447.3	7287.8
5°	8143.6	8129.1	8082.7	8036.3	7984.0	7926.0	7894.1	7766.5	7621.4	7418.3	7139.8
7.5°	8158.1	8140.7	8082.7	8018.9	7946.3	7876.7	7821.6	7693.9	7560.5	7354.5	7015.0
10°	8134.9	8114.6	8071.1	8001.4	7911.5	7844.8	7789.7	7667.8	7554.7	7369.0	6991.8
12.5°	8108.8	8088.5	8068.2	8033.4	7955.0	7908.6	7862.2	7746.1	7644.6	7487.9	7076.0
15°	8134.9	8123.3	8146.5	8132.0	8088.5	8047.9	8001.4	7897.0	7804.2	7673.6	7229.7
17.5°	8245.1	8245.1	8317.7	8326.4	8285.8	8227.7	8161.0	8056.6	7978.2	7868.0	7412.5
20°	8503.3	8494.6	8587.5	8604.9	8506.3	8416.3	8317.7	8190.0	8129.1	8059.5	7592.4
22.5°	8947.2	8906.6	8961.7	8944.3	8749.9	8610.7	8488.8	8332.2	8300.3	8268.4	7792.6
25°	9524.6	9501.4	9539.1	9367.9	9025.6	8837.0	8691.9	8515.0	8515.0	8546.9	8018.9
27.5°	10363.0	10276.0	10148.3	9846.6	9333.1	9092.3	8935.6	8747.0	8796.4	8915.3	8317.7
30°	11221.8	11126.0	10833.0	10368.8	9707.3	9454.9	9272.2	9074.9	9190.9	9408.5	8718.0
32.5°	12068.9	11961.6	11546.7	10960.6	10244.1	9991.7	9814.7	9597.1	9791.5	10157.0	9304.1
35°	12889.9	12794.2	12315.5	11625.0	10957.7	10748.9	10586.4	10397.8	10647.3	11157.9	10130.9
37.5°	13812.5	13708.1	13124.9	12376.4	11825.2	11674.3	11555.4	11366.8	11802.0	12550.5	11282.7
40°	14946.9	14769.9	13983.7	13238.1	12829.0	12756.5	12675.2	12649.1	13325.1	14360.8	12817.4
42.5°	16246.6	15956.5	14883.0	14146.1	13931.5	13983.7	13963.4	14079.4	15231.2	16612.1	14685.8
45°	17546.3	17172.1	15883.9	15115.1	15144.1	15326.9	15440.1	15904.3	17618.8	19194.2	16696.3
47.5°	18648.8	18280.3	16844.2	16162.5	16510.6	16870.3	17177.9	18056.9	20073.2	21735.6	18260.0
50°	19591.6	19243.5	17862.5	17314.2	18097.5	18677.8	19176.8	20479.4	22713.3	23670.7	19356.7
52.5°	20363.4	20131.3	18918.6	18634.3	19910.8	20760.8	21491.9	23052.8	25051.7	25243.1	20209.6
55°	21114.8	20949.4	20052.9	20203.8	22040.2	23197.8	24123.3	25782.8	27065.1	26554.5	21027.7
57.5°	21979.3	21828.5	21346.9	22194.0	24839.9	26296.3	27305.9	28202.3	28837.7	27894.8	21799.4
60°	22861.3	22774.2	22785.8	24404.7	28054.4	29452.7	30009.8	30241.9	30578.4	29156.8	21843.0
62.5°	23702.6	23868.0	24430.8	26864.9	31132.5	32206.0	32487.4	32716.6	32322.0	29357.0	20180.6
65°	25127.1	25396.9	26740.1	30157.7	34518.2	35667.1	35957.2	35171.0	32597.6	26769.2	16414.9
67.5°	25823.4	26316.6	28712.9	33227.2	37802.3	39078.9	38971.5	35330.5	29252.6	20412.7	10534.2
69°	25678.3	26203.4	29168.4	34167.2	38893.2	40050.7	39369.0	33378.0	24921.1	14787.3	6466.7
70°	25103.9	25634.8	28933.4	34132.3	39032.4	39949.2	38632.1	30967.2	21071.2	10812.7	4044.2
72.5°	20963.9	21422.3	25687.0	30851.1	35957.2	35211.6	32319.1	21454.2	10267.3	2944.7	911.0
75°	12904.4	13159.7	18431.2	23241.3	27157.9	25243.1	21532.5	10673.4	3060.7	832.6	504.8
77.5°	6817.8	6933.8	10090.3	13699.4	17215.6	14244.8	11036.1	4163.2	1410.0	522.2	365.5
80°	4029.7	4116.8	5433.9	6263.6	7450.2	6223.0	4412.7	2555.9	1009.6	327.8	324.9
82.5°	2306.4	2361.6	3939.8	3481.4	2936.0	2506.6	2196.2	2422.5	606.3	220.5	336.5
85°	847.1	858.7	2216.5	2648.8	1746.5	1038.6	1090.8	2007.6	162.5	139.3	264.0
87.5°	394.6	385.9	1140.2	1621.8	1021.2	658.6	850.0	441.0	63.8	89.9	72.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0	7282.0
2.5°	7194.9	7087.6	6893.2	6693.0	6489.9	6333.3	6179.5	6057.7	6017.0	5941.6	5947.4
5°	6974.4	6777.1	6371.0	5959.0	5529.6	5175.7	4842.1	4572.3	4441.7	4308.2	4308.2
7.5°	6783.0	6495.7	5860.4	5190.2	4496.8	3913.7	3388.6	2994.0	2776.4	2602.4	2599.5
10°	6710.4	6321.7	5433.9	4473.6	3507.5	2712.6	2088.8	1688.5	1482.5	1349.0	1343.2
12.5°	6742.3	6260.7	5106.1	3812.1	2599.5	1743.6	1209.8	951.6	864.6	823.9	823.9
15°	6835.2	6243.3	4778.2	3165.2	1836.4	1090.8	803.6	734.0	728.2	728.2	728.2
17.5°	6948.3	6249.1	4441.7	2535.6	1250.4	780.4	693.4	684.7	690.5	690.5	690.5
20°	7064.4	6252.0	4079.1	1952.5	882.0	678.9	652.8	649.9	655.7	655.7	658.6
22.5°	7206.5	6266.5	3716.4	1459.3	728.2	641.2	620.9	620.9	623.8	623.8	620.9
25°	7369.0	6295.6	3339.3	1082.1	664.4	615.0	597.6	594.7	597.6	594.7	591.8
27.5°	7572.1	6336.2	2918.6	847.1	635.4	588.9	574.4	574.4	571.5	568.6	565.7
30°	7827.4	6382.6	2445.7	719.5	606.3	565.7	551.2	548.3	545.4	539.6	539.6
32.5°	8216.1	6484.1	1978.6	652.8	574.4	533.8	522.2	522.2	516.4	510.6	507.7
35°	8813.8	6684.3	1560.8	612.1	539.6	499.0	484.5	484.5	478.7	475.8	472.9
37.5°	9640.6	6988.9	1212.7	574.4	504.8	461.3	446.8	443.9	438.1	432.3	429.4
40°	10740.2	7366.1	954.5	539.6	470.0	423.6	412.0	406.2	394.6	385.9	385.9
42.5°	12121.1	7795.5	774.6	501.9	429.4	388.8	380.1	371.4	351.0	342.3	339.4
45°	13565.9	8181.3	655.7	458.4	388.8	353.9	348.1	333.6	307.5	298.8	298.8
47.5°	14607.4	8271.3	577.3	417.8	351.0	316.2	313.3	287.2	264.0	258.2	255.3
50°	15257.3	8094.3	513.5	377.2	316.2	281.4	272.7	240.8	226.3	220.5	217.6
52.5°	15695.4	7778.1	461.3	342.3	284.3	249.5	229.2	206.0	194.4	188.6	188.6
55°	16046.4	7331.3	409.1	310.4	258.2	223.4	194.4	177.0	165.4	159.6	159.6
57.5°	16145.0	6724.9	356.8	284.3	232.1	197.3	165.4	153.8	139.3	136.4	136.4
60°	15428.5	5631.2	316.2	252.4	208.9	171.2	145.1	130.6	116.0	113.1	110.2
62.5°	13539.8	4357.6	278.5	223.4	182.8	148.0	124.8	107.3	95.7	95.7	95.7
65°	10328.2	2921.5	243.7	194.4	159.6	124.8	107.3	87.0	81.2	81.2	84.1
67.5°	6182.4	1589.8	208.9	165.4	136.4	104.4	89.9	75.4	72.5	75.4	75.4
69°	3623.6	934.2	188.6	148.0	118.9	92.8	78.3	66.7	72.5	75.4	75.4
70°	2236.8	629.6	174.1	133.5	107.3	84.1	72.5	63.8	69.6	72.5	72.5
72.5°	623.8	324.9	139.3	104.4	87.0	69.6	58.0	58.0	66.7	69.6	69.6
75°	406.2	240.8	107.3	78.3	66.7	55.1	49.3	55.1	63.8	66.7	66.7
77.5°	336.5	197.3	87.0	63.8	55.1	52.2	46.4	49.3	58.0	60.9	60.9
80°	307.5	139.3	69.6	58.0	49.3	46.4	43.5	40.6	52.2	55.1	55.1
82.5°	293.0	110.2	60.9	52.2	46.4	40.6	37.7	40.6	46.4	49.3	52.2
85°	182.8	72.5	55.1	49.3	40.6	37.7	37.7	37.7	43.5	46.4	46.4
87.5°	66.7	58.0	49.3	40.6	34.8	34.8	34.8	34.8	37.7	43.5	43.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)