

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: P652324

Luminaire Tested: **GALN-SA4B-840-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652324  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4B-840-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15510.5 lumens  
Efficiency: N/A  
Efficacy: 94.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

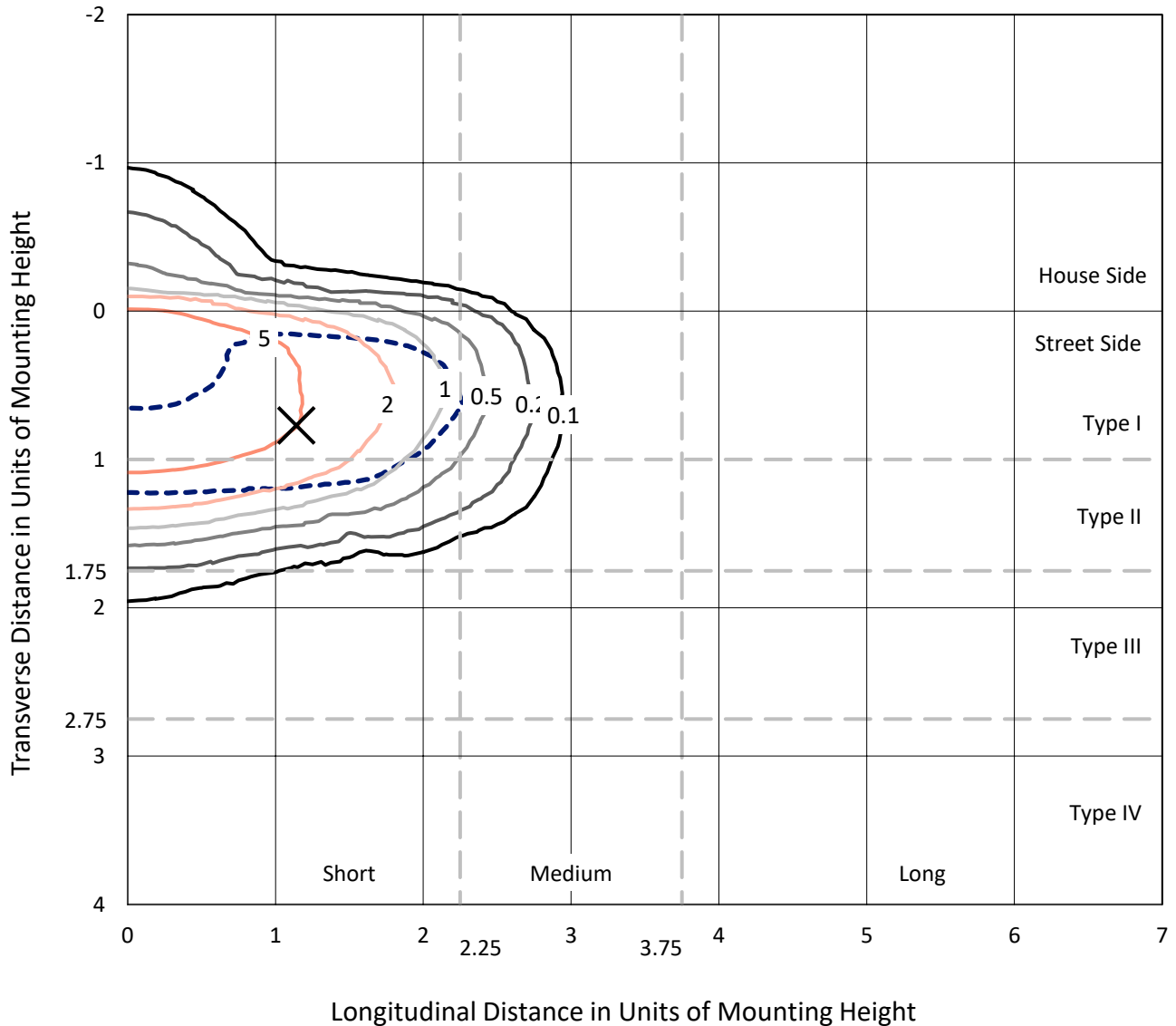
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P652324  
 CATALOG NUMBER: GALN-SA4B-840-U-AFL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

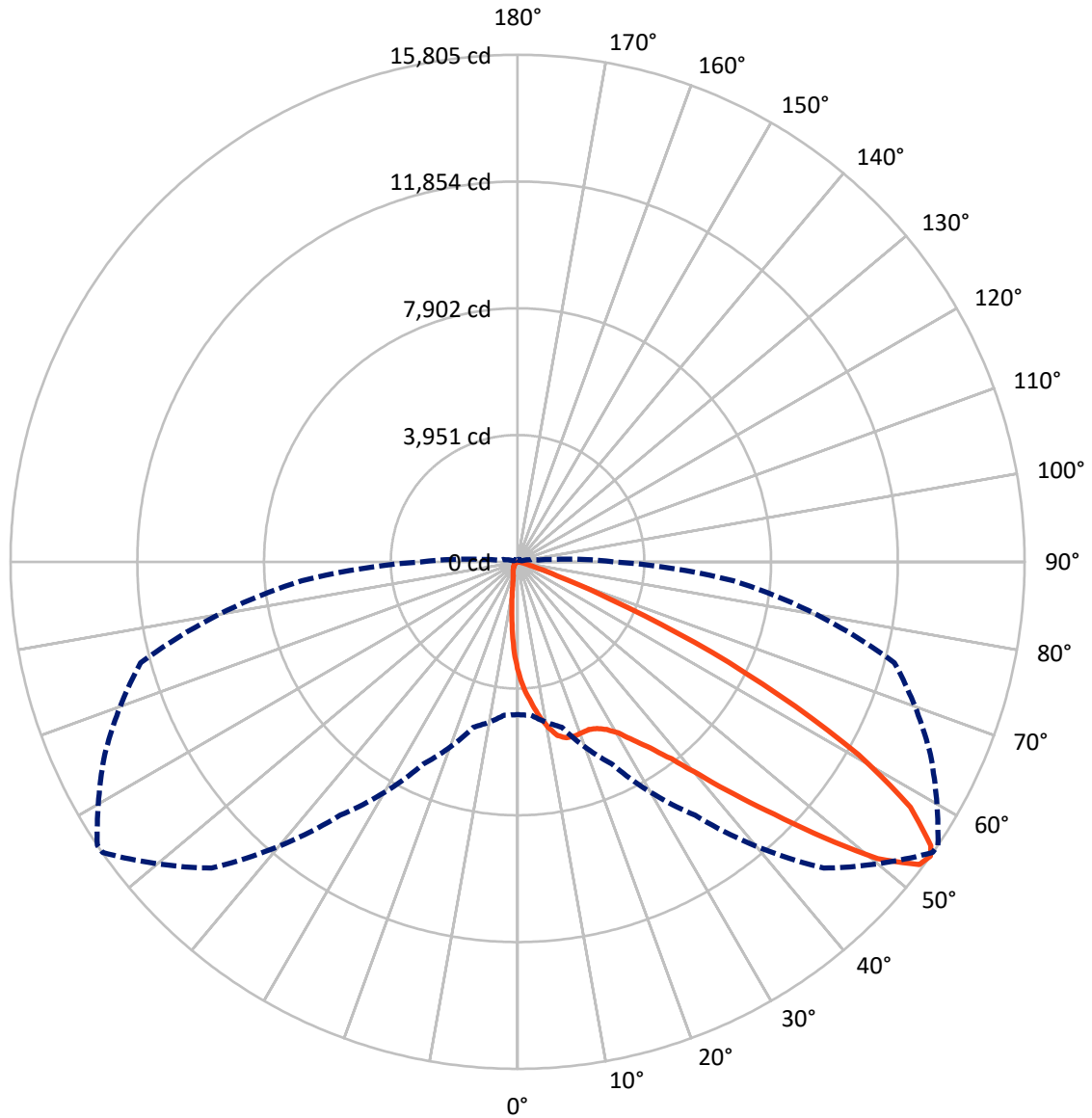
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc  
 Type II - Short - N/A

REPORT NUMBER: P652324  
CATALOG NUMBER: GALN-SA4B-840-U-AFL-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 54-Deg Vertical

REPORT NUMBER: P652324  
 CATALOG NUMBER: GALN-SA4B-840-U-AFL-HSS

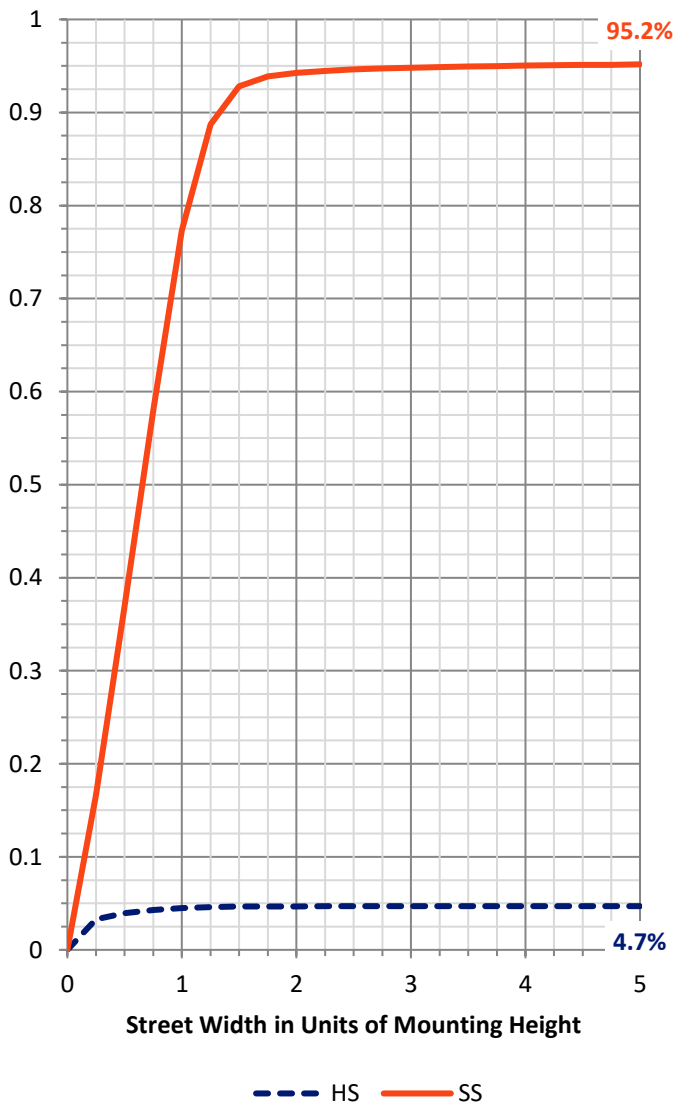
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	733.4	0.0	733.4
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	14777.1	0.0	14777.1
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	15510.5	0.0	15510.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	304.5	2.0
10°-20°	823.2	5.3
20°-30°	1425.7	9.2
30°-40°	2461.0	15.9
40°-50°	4188.7	27.0
50°-60°	4145.2	26.7
60°-70°	1892.0	12.2
70°-80°	243.0	1.6
80°-90°	27.4	0.2
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°	15510.5	100.0
0°-180°	15510.5	100.0

**Coefficient of Utilization**



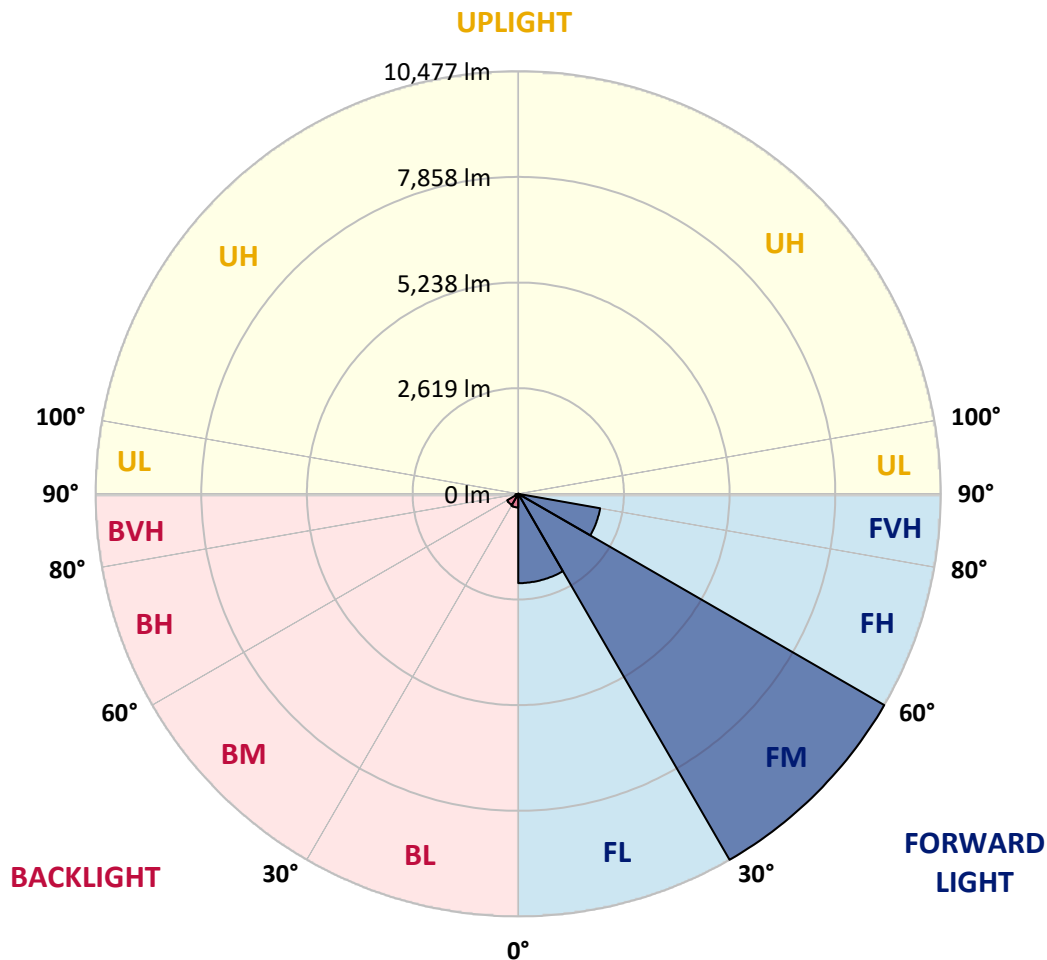
REPORT NUMBER: P652324  
 CATALOG NUMBER: GALN-SA4B-840-U-AFL-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2214.2	14.3			
FM (30°-60°)	10477.0	67.5			
FH (60°-80°)	2061.5	13.3			G2/5000
FVH (80°-90°)	24.4	0.2			G1/100
BL (0°-30°)	339.2	2.2	B1/500		
BM (30°-60°)	317.9	2.0	B1/1000		
BH (60°-80°)	73.4	0.5	B0/110		G0/110
BVH (80°-90°)	2.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Short





REPORT NUMBER: P652324

CATALOG NUMBER: GALN-SA4B-840-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0
2.5°	4379.4	4349.1	4307.3	4274.8	4198.4	4088.5	3972.4	3972.4	3860.4	3704.4	3545.4
5°	5051.3	5031.4	4990.6	4906.9	4821.0	4667.2	4433.8	4393.0	4193.1	3910.6	3613.4
7.5°	5324.4	5333.8	5335.9	5313.9	5273.2	5121.4	4890.1	4861.9	4542.7	4163.9	3702.4
10°	5062.8	5108.8	5153.8	5244.9	5373.6	5410.2	5279.4	5250.1	4936.2	4420.3	3798.6
12.5°	4673.5	4698.6	4723.7	4867.1	5125.6	5421.8	5558.8	5557.7	5292.0	4675.6	3921.1
15°	4492.5	4514.4	4516.5	4580.3	4804.3	5235.5	5678.1	5693.8	5639.4	4990.6	4052.9
17.5°	4530.1	4548.0	4533.2	4549.0	4666.2	5030.4	5664.5	5716.9	5920.9	5293.0	4172.3
20°	4776.0	4810.6	4754.1	4710.1	4745.7	4975.9	5618.5	5691.7	6119.7	5588.1	4281.1
22.5°	5217.6	5236.5	5165.3	5045.0	4982.2	5090.0	5605.9	5678.1	6289.3	5829.8	4343.8
25°	5708.5	5702.1	5623.7	5488.7	5356.8	5320.3	5688.6	5753.4	6429.4	6047.5	4362.7
27.5°	6199.3	6218.1	6086.2	5918.8	5760.8	5665.6	5873.8	5921.9	6587.5	6295.6	4385.7
30°	6769.5	6739.2	6609.4	6417.9	6236.9	6104.0	6172.0	6185.6	6805.1	6624.1	4446.5
32.5°	7511.5	7427.8	7282.3	6947.5	6817.7	6592.7	6609.4	6626.2	7069.9	6949.5	4519.7
35°	8518.2	8514.0	8229.4	7778.3	7462.4	7182.9	7109.6	7123.3	7470.7	7433.0	4681.8
37.5°	9730.0	9746.8	9422.3	8968.2	8386.4	7942.7	7791.9	7794.1	8079.7	8100.7	4928.8
40°	10716.9	10760.8	10567.2	10260.5	9686.0	8992.2	8739.0	8716.0	8935.7	8909.6	5281.5
42.5°	11141.7	11182.5	11254.7	11361.4	11045.4	10473.0	9875.4	9906.9	9973.8	9790.7	5677.1
45°	10933.4	10998.3	11281.9	11941.2	12238.4	12045.8	11333.1	11223.3	10939.7	10748.2	6074.7
47.5°	10065.9	10224.0	10698.0	11795.7	12835.9	13486.8	12978.2	12832.7	11906.6	11447.3	6327.9
50°	8639.6	8649.0	9309.4	10712.7	12526.2	14396.2	14657.8	14549.0	12807.7	11839.7	6455.6
52.5°	6263.1	6469.2	7074.1	8699.2	11184.6	14258.1	15728.3	15683.3	13736.9	12040.6	6639.8
54°	4761.4	4801.2	5339.1	6951.6	9643.2	13499.4	15794.2	15804.7	14198.4	12162.0	6748.6
55°	3903.3	3808.0	4373.2	5921.9	8591.5	12828.6	15578.7	15628.9	14405.6	12224.8	6829.3
57.5°	1850.1	1851.2	2283.4	3123.7	5380.9	9961.3	14261.2	14439.1	14428.6	12332.6	7077.3
60°	936.6	942.8	1038.1	1442.1	2658.0	6622.0	11791.6	12215.4	13318.3	12348.2	7158.8
62.5°	655.1	647.7	632.1	693.8	1118.7	3365.4	8778.8	9147.1	11315.4	11750.7	6899.3
65°	560.9	545.2	501.2	491.8	565.1	1340.6	5467.8	6068.4	8639.6	10174.8	6160.5
67.5°	479.3	473.0	433.2	409.1	399.7	583.9	2821.3	3137.3	5905.2	7313.8	4666.2
70°	407.0	403.9	379.9	349.5	323.4	349.5	1046.5	1296.6	3291.1	3937.8	2201.7
72.5°	330.7	333.8	338.0	299.3	272.1	248.0	446.8	520.1	1377.1	1407.5	770.2
75°	289.9	286.7	286.7	260.5	227.1	184.2	245.9	264.7	421.8	391.4	179.0
77.5°	204.0	196.7	230.2	214.5	189.4	130.8	140.2	148.6	174.8	149.6	83.7
80°	141.3	141.3	147.5	192.6	170.6	95.2	85.8	92.1	103.6	89.0	48.1
82.5°	79.6	81.7	96.3	102.5	99.4	63.8	56.5	57.5	69.0	60.7	30.4
85°	9.4	15.7	55.4	54.4	40.8	28.3	31.4	32.5	42.9	37.7	17.8
87.5°	1.0	2.1	11.5	14.6	10.4	11.5	11.5	11.5	14.6	16.7	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



REPORT NUMBER: P652324

CATALOG NUMBER: GALN-SA4B-840-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0	3446.0
2.5°	3459.6	3380.1	3190.7	2970.9	2830.7	2602.6	2410.0	2270.8	2236.3	2169.3	2189.2
5°	3455.4	3290.1	2904.0	2495.8	2060.4	1736.1	1494.4	1303.9	1220.2	1164.7	1126.0
7.5°	3457.5	3199.0	2579.5	1929.7	1409.6	1091.4	867.5	751.3	673.9	641.5	645.6
10°	3463.8	3096.5	2202.8	1429.4	951.3	705.3	568.3	512.8	486.6	482.4	481.4
12.5°	3478.5	2984.5	1842.8	1061.1	665.6	512.8	460.4	441.6	433.2	433.2	430.1
15°	3494.1	2861.0	1543.6	789.0	512.8	440.6	416.5	407.0	401.8	401.8	400.8
17.5°	3494.1	2718.7	1264.1	612.2	441.6	404.9	386.1	373.6	369.4	369.4	368.4
20°	3472.2	2553.4	1016.1	492.9	400.8	371.5	352.6	339.1	333.8	331.7	330.7
22.5°	3395.8	2332.6	808.9	423.8	367.3	342.2	318.2	302.4	298.2	296.1	297.2
25°	3259.7	2083.5	640.4	372.6	337.0	306.6	285.7	274.2	270.0	270.0	271.1
27.5°	3119.5	1823.0	507.5	333.8	300.3	273.2	256.4	249.0	248.0	251.1	252.2
30°	2989.8	1561.3	411.2	302.4	267.9	244.9	233.4	231.3	231.3	232.3	233.4
32.5°	2845.4	1332.1	344.3	275.3	241.7	221.9	215.5	215.5	217.7	217.7	219.8
35°	2754.3	1135.4	302.4	249.0	221.9	205.1	200.9	202.0	205.1	209.3	211.4
37.5°	2705.1	978.4	275.3	228.2	203.0	191.5	187.3	189.4	196.7	204.0	205.1
40°	2709.3	860.2	253.2	210.3	188.4	175.8	172.7	179.0	186.3	193.6	194.6
42.5°	2755.4	772.3	232.3	189.4	175.8	158.0	156.9	163.2	166.3	173.8	174.8
45°	2809.8	708.5	210.3	167.4	152.8	137.1	138.1	143.4	147.5	159.0	161.1
47.5°	2826.5	664.5	185.2	142.3	125.6	120.3	121.4	124.6	132.9	143.4	144.4
50°	2845.4	637.3	161.1	120.3	106.7	105.7	106.7	108.8	114.0	118.2	117.2
52.5°	2925.9	636.2	141.3	104.6	91.1	93.1	94.2	93.1	89.0	82.7	80.6
54°	3001.3	639.4	131.9	97.3	83.7	86.9	85.8	80.6	70.1	63.8	60.7
55°	3061.9	642.5	126.7	92.1	79.6	80.6	81.7	71.1	57.5	51.3	49.2
57.5°	3181.3	635.2	114.0	80.6	70.1	65.9	64.8	47.1	31.4	27.2	25.1
60°	3121.6	573.5	103.6	69.0	59.6	53.4	44.0	26.2	15.7	11.5	11.5
62.5°	2887.2	486.6	92.1	56.5	49.2	40.8	23.0	14.6	7.3	4.2	3.1
65°	2582.7	409.1	82.7	45.0	38.7	26.2	12.5	9.4	3.1	0.0	0.0
67.5°	1920.3	303.4	70.1	35.6	29.3	16.7	8.4	5.2	1.0	0.0	0.0
70°	889.5	185.2	59.6	27.2	20.9	12.5	6.3	3.1	0.0	0.0	0.0
72.5°	255.3	116.1	49.2	19.8	14.6	10.4	5.2	2.1	1.0	0.0	0.0
75°	89.0	93.1	36.7	14.6	11.5	7.3	4.2	2.1	1.0	0.0	0.0
77.5°	53.4	75.4	23.0	12.5	9.4	6.3	4.2	2.1	1.0	1.0	0.0
80°	30.4	50.2	14.6	10.4	8.4	5.2	3.1	2.1	1.0	1.0	0.0
82.5°	16.7	24.1	11.5	9.4	7.3	5.2	3.1	2.1	1.0	1.0	1.0
85°	13.6	12.5	9.4	8.4	6.3	4.2	3.1	1.0	0.0	0.0	0.0
87.5°	10.4	8.4	8.4	8.4	6.3	4.2	3.1	1.0	0.0	0.0	0.0
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)