

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: P651863

Luminaire Tested: **GALN-SA4A-840-U-T3-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651863  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-840-U-T3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11170.2 lumens  
Efficiency: N/A  
Efficacy: 92.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

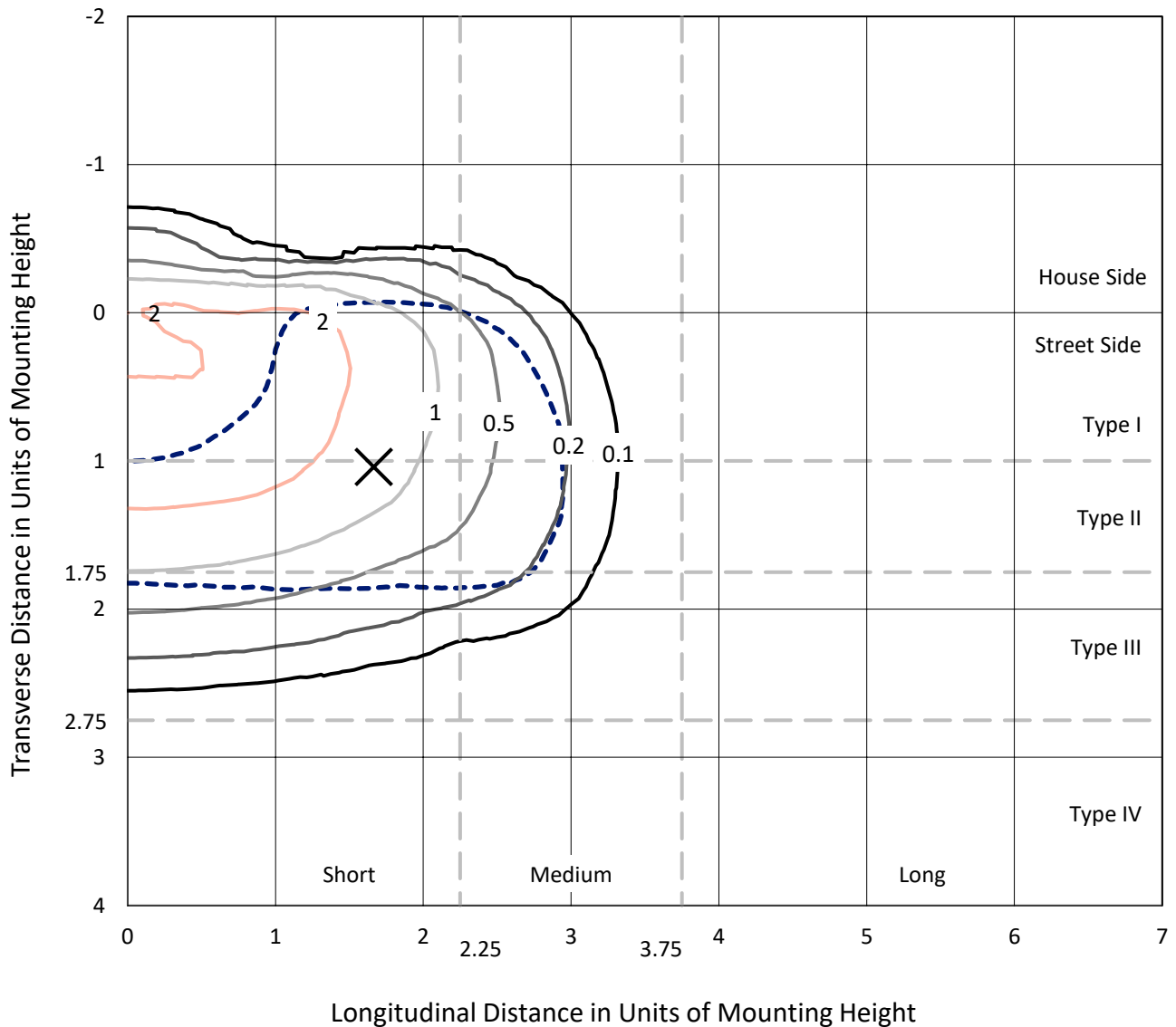
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

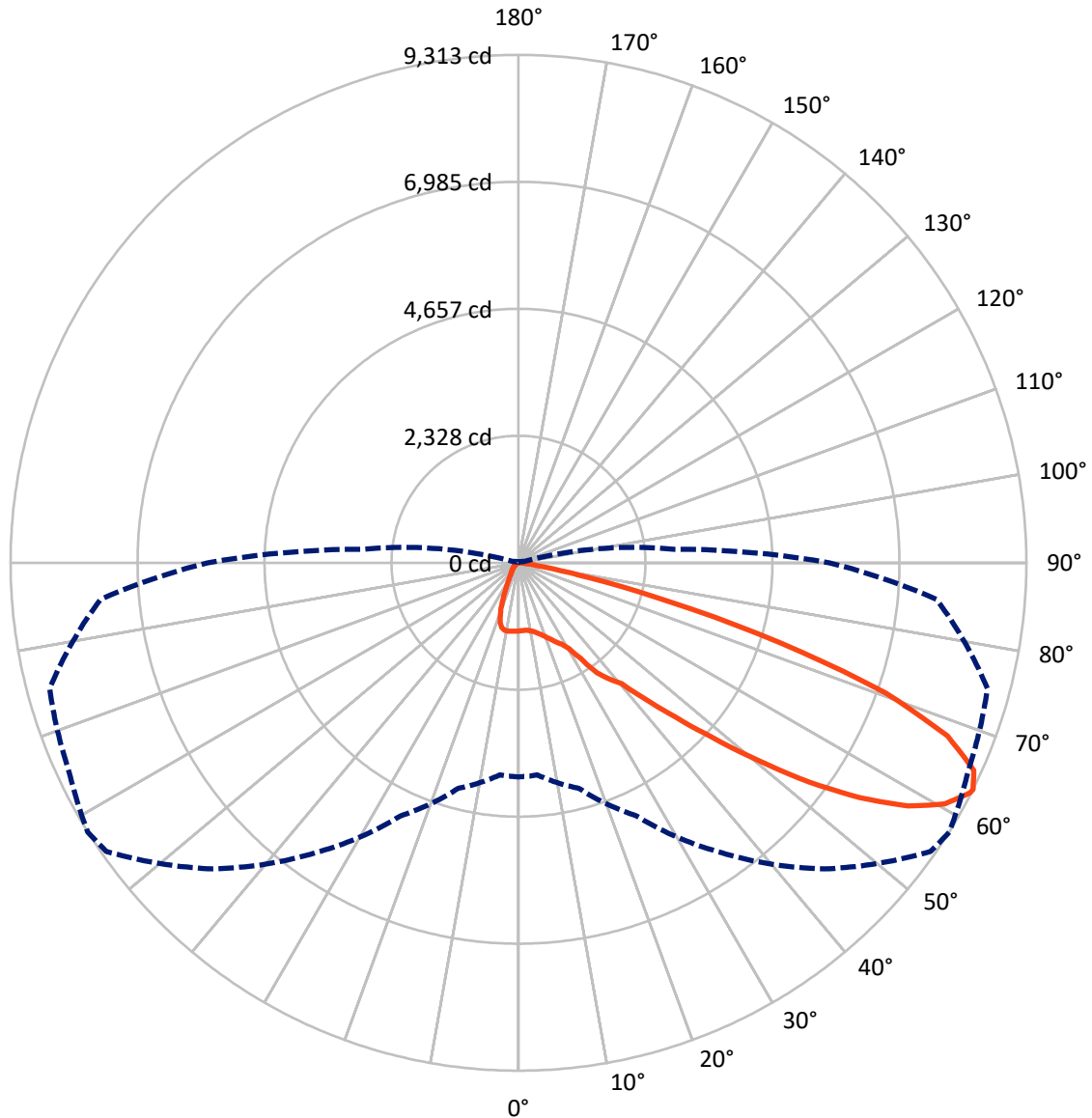
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

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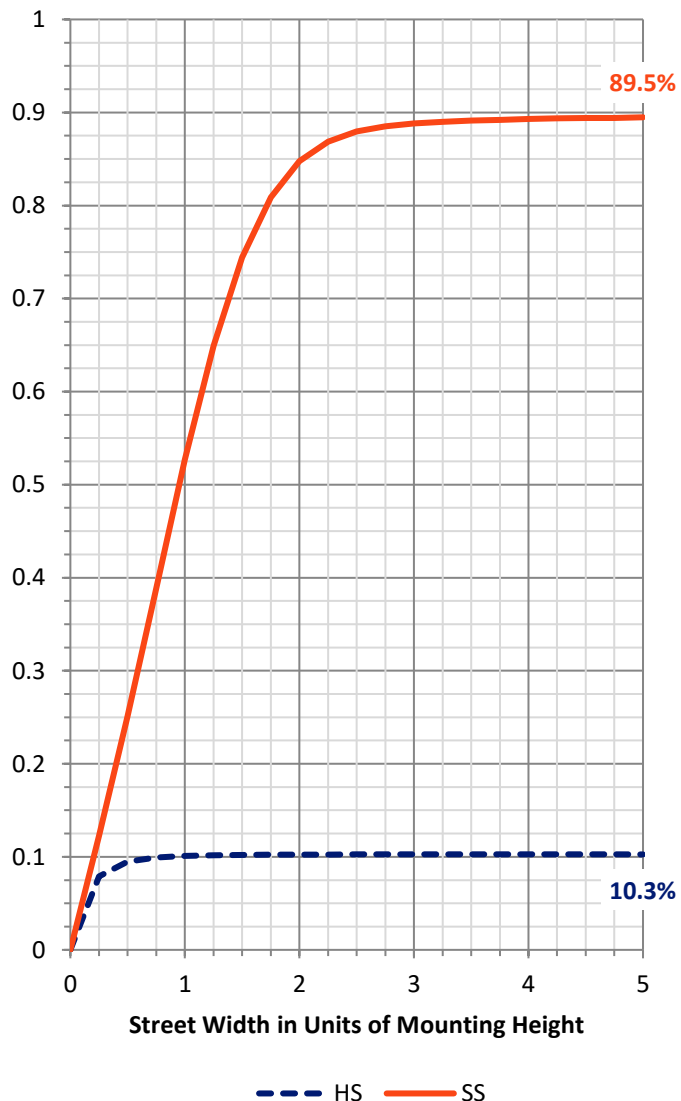
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1156.6	0.0	1156.6
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	10013.6	0.0	10013.6
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	11170.2	0.0	11170.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.1	1.0
10°-20°	318.9	2.9
20°-30°	553.4	5.0
30°-40°	1016.9	9.1
40°-50°	1914.3	17.1
50°-60°	3274.3	29.3
60°-70°	3135.1	28.1
70°-80°	799.5	7.2
80°-90°	40.9	0.4
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°	11170.2	100.0
0°-180°	11170.2	100.0

**Coefficient of Utilization**

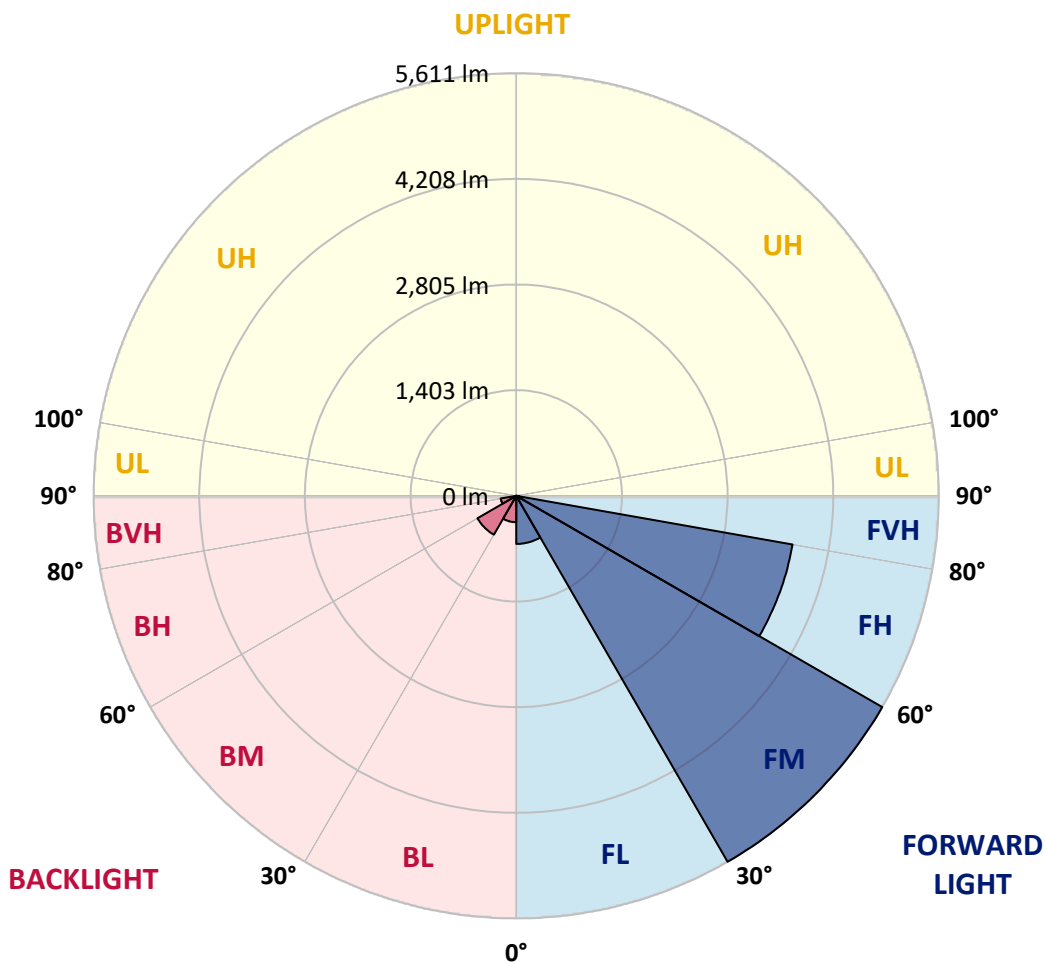


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	638.5	5.7			
FM (30°-60°)	5610.5	50.2			
FH (60°-80°)	3725.2	33.3			G2/5000
FVH (80°-90°)	39.3	0.4			G1/100
BL (0°-30°)	350.8	3.1	B1/500		
BM (30°-60°)	594.9	5.3	B1/1000		
BH (60°-80°)	209.4	1.9	B1/500		G1/500
BVH (80°-90°)	1.6	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6
2.5°	1219.4	1223.7	1227.9	1229.5	1235.4	1241.3	1245.5	1244.7	1251.4	1254.8	1254.8
5°	1170.7	1170.7	1181.6	1191.7	1208.5	1225.3	1241.3	1244.7	1257.3	1269.1	1273.3
7.5°	1129.5	1132.0	1140.4	1158.9	1181.6	1211.0	1243.0	1250.6	1272.4	1298.5	1309.4
10°	1110.1	1111.8	1122.7	1142.1	1170.7	1211.0	1255.6	1269.9	1303.6	1344.8	1359.9
12.5°	1105.9	1108.4	1119.4	1141.2	1174.0	1222.8	1283.4	1298.5	1347.3	1400.3	1423.0
15°	1113.5	1115.2	1126.1	1149.6	1185.8	1243.8	1320.4	1341.4	1399.4	1460.8	1490.3
17.5°	1140.4	1138.7	1146.3	1165.6	1206.0	1269.9	1364.9	1390.2	1458.3	1542.4	1561.7
20°	1254.8	1243.8	1237.1	1220.3	1236.3	1306.9	1418.8	1455.8	1539.9	1625.7	1639.1
22.5°	1501.2	1476.8	1428.9	1363.3	1312.8	1357.4	1483.5	1526.4	1634.9	1719.0	1719.0
25°	1814.9	1783.8	1735.8	1592.9	1469.2	1440.6	1556.7	1610.5	1738.3	1823.3	1795.5
27.5°	2207.5	2183.2	2089.9	1923.4	1734.1	1586.1	1641.6	1691.3	1830.0	1932.6	1874.6
30°	2527.1	2515.3	2438.8	2290.0	2081.5	1865.3	1799.7	1832.5	1952.0	2070.5	2010.8
32.5°	2797.1	2797.1	2718.9	2580.1	2385.0	2193.2	2068.0	2091.6	2205.9	2342.9	2231.9
35°	3094.0	3083.9	3020.8	2888.8	2670.1	2501.0	2449.7	2481.7	2585.1	2686.9	2413.6
37.5°	3406.0	3402.6	3337.0	3209.2	3030.9	2818.1	2697.8	2706.3	2759.2	2821.5	2626.4
40°	3744.9	3749.9	3664.2	3585.1	3416.9	3199.1	2968.6	2915.7	2965.3	3141.1	3019.1
42.5°	4145.2	4133.4	4096.4	3988.8	3853.4	3723.0	3446.3	3427.0	3470.7	3659.1	3527.1
45°	4610.3	4627.1	4563.2	4503.5	4412.6	4304.2	4072.9	4039.2	4087.2	4379.8	4192.3
47.5°	5076.2	5060.2	5101.4	5090.5	5139.3	5058.5	4854.2	4785.2	4900.4	5178.0	4902.1
50°	5431.1	5448.8	5534.5	5659.8	5869.3	5914.7	5718.7	5695.2	5746.5	5924.8	5537.1
52.5°	5661.5	5720.4	5855.0	6177.1	6554.6	6848.1	6699.2	6686.6	6665.6	6713.5	6144.3
55°	5812.1	5871.8	6047.5	6521.9	7171.9	7648.7	7656.3	7602.5	7463.7	7429.2	6711.9
57.5°	5719.6	5731.3	5981.9	6616.0	7514.2	8219.8	8467.0	8413.2	8156.7	8026.3	7213.1
60°	5140.9	5165.3	5514.4	6259.5	7365.3	8406.5	9004.4	8980.0	8699.1	8552.0	7603.3
62.5°	4115.8	4186.4	4545.5	5376.4	6673.2	8091.9	9222.2	9291.2	9072.5	8869.9	7726.1
63°	3927.4	3904.7	4284.0	5119.1	6489.9	7936.3	9225.6	9313.1	9089.4	8900.1	7692.5
65°	2907.3	2975.4	3221.8	4036.7	5400.8	7212.2	9017.9	9172.6	9027.1	8766.4	7319.9
67.5°	1632.4	1629.0	1901.5	2641.5	3780.2	5657.3	8154.2	8481.3	8451.0	7866.5	6067.7
70°	798.9	811.6	923.4	1369.1	2192.4	3903.0	6775.8	7129.0	7139.9	6178.7	4195.7
72.5°	361.6	367.5	447.4	666.9	1126.9	2078.1	4669.1	5006.4	4944.2	3937.5	2316.9
75°	190.9	203.5	246.4	335.6	543.3	857.0	2539.7	2866.0	2735.7	1798.9	852.8
77.5°	141.3	145.5	167.4	213.6	291.0	333.9	1095.8	1303.6	1221.1	650.9	282.6
80°	103.4	106.8	124.5	151.4	183.3	169.9	412.9	473.5	424.7	221.2	86.6
82.5°	63.1	63.9	90.8	112.7	115.2	95.0	136.2	146.3	153.1	124.5	47.1
85°	22.7	28.6	61.4	81.6	68.1	47.9	57.2	63.1	69.0	79.1	27.8
87.5°	2.5	3.4	29.4	39.5	19.3	17.7	21.0	23.5	25.2	29.4	13.5
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°	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6	1250.6
2.5°	1258.1	1261.5	1259.0	1254.8	1253.9	1251.4	1246.4	1246.4	1246.4	1248.0	1246.4
5°	1276.6	1279.2	1273.3	1264.9	1255.6	1243.8	1231.2	1223.7	1222.8	1221.1	1216.9
7.5°	1312.0	1315.3	1301.9	1281.7	1256.5	1227.9	1200.9	1175.7	1163.9	1154.7	1154.7
10°	1363.3	1366.6	1339.7	1303.6	1253.1	1195.1	1131.1	1073.1	1027.7	1006.7	1001.6
12.5°	1424.7	1426.3	1381.8	1318.7	1235.4	1123.6	987.3	860.3	772.0	731.7	727.5
15°	1491.9	1480.2	1421.3	1324.6	1185.0	976.4	740.9	585.3	493.7	466.8	476.8
17.5°	1560.1	1538.2	1451.6	1315.3	1071.4	740.9	497.9	399.5	370.9	363.3	363.3
20°	1624.0	1593.7	1473.4	1275.0	874.6	510.5	369.2	345.7	340.6	335.6	336.4
22.5°	1687.9	1641.6	1492.8	1185.0	651.8	365.0	330.5	322.9	316.2	309.5	308.6
25°	1750.1	1686.2	1500.3	1018.5	444.0	313.7	301.9	291.8	278.4	270.8	269.1
27.5°	1814.9	1740.0	1495.3	808.2	323.8	280.9	269.1	254.8	238.8	225.4	225.4
30°	1939.3	1842.6	1477.6	581.1	272.5	247.3	232.1	209.4	191.7	178.3	177.5
32.5°	2109.2	1976.4	1417.1	408.7	242.2	217.8	195.1	169.9	151.4	141.3	141.3
35°	2260.5	2110.9	1303.6	301.1	217.8	189.2	161.5	137.1	122.8	116.1	113.5
37.5°	2491.0	2307.6	1147.1	244.7	194.3	164.0	135.4	112.7	100.9	95.9	95.9
40°	2836.6	2548.1	955.4	214.5	171.6	139.6	112.7	95.0	85.8	79.9	79.9
42.5°	3265.5	2842.5	761.1	192.6	150.5	120.3	94.2	80.7	72.3	68.1	67.3
45°	3805.4	3152.8	586.2	172.4	133.7	102.6	79.9	68.1	59.7	57.2	58.0
47.5°	4368.9	3426.1	454.1	154.7	116.1	86.6	68.1	58.9	53.0	49.6	49.6
50°	4850.0	3614.5	344.8	134.6	102.6	73.2	59.7	53.0	47.9	46.3	45.4
52.5°	5252.0	3669.2	264.1	116.9	90.0	63.1	53.0	47.9	43.7	41.2	41.2
55°	5594.2	3621.3	206.9	98.4	75.7	54.7	47.1	42.9	37.8	35.3	34.5
57.5°	5794.4	3467.4	158.1	81.6	61.4	45.4	41.2	36.2	30.3	26.1	26.1
60°	5895.3	3243.7	121.1	67.3	47.1	36.2	33.6	26.9	21.0	17.7	16.8
62.5°	5774.2	2946.8	91.7	53.0	35.3	26.9	22.7	19.3	13.5	10.1	10.1
63°	5699.4	2861.0	88.3	50.5	32.8	25.2	21.0	17.7	11.8	9.3	8.4
65°	5195.6	2486.8	72.3	40.4	26.1	17.7	14.3	12.6	8.4	4.2	3.4
67.5°	4125.9	1902.3	57.2	30.3	18.5	12.6	8.4	7.6	2.5	0.0	0.0
70°	2789.5	1228.7	44.6	21.9	12.6	7.6	4.2	3.4	0.8	0.0	0.0
72.5°	1454.9	629.9	34.5	16.0	7.6	5.0	2.5	0.8	0.0	0.0	0.0
75°	514.7	214.5	25.2	10.1	5.0	2.5	0.8	0.0	0.0	0.0	0.0
77.5°	155.6	79.9	16.0	7.6	3.4	1.7	0.0	0.0	0.0	0.0	0.0
80°	54.7	29.4	9.3	5.0	2.5	0.8	0.0	0.0	0.0	0.0	0.0
82.5°	26.9	14.3	5.9	4.2	2.5	0.8	0.0	0.0	0.0	0.0	0.0
85°	15.1	9.3	5.0	4.2	2.5	1.7	0.0	0.0	0.0	0.0	0.0
87.5°	10.9	6.7	5.0	4.2	3.4	1.7	0.8	0.0	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)