

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: P648390

Luminaire Tested: **GALN-SA4B-835-U-T2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P648390  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4B-835-U-T2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13176.3 lumens  
Efficiency: N/A  
Efficacy: 80.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

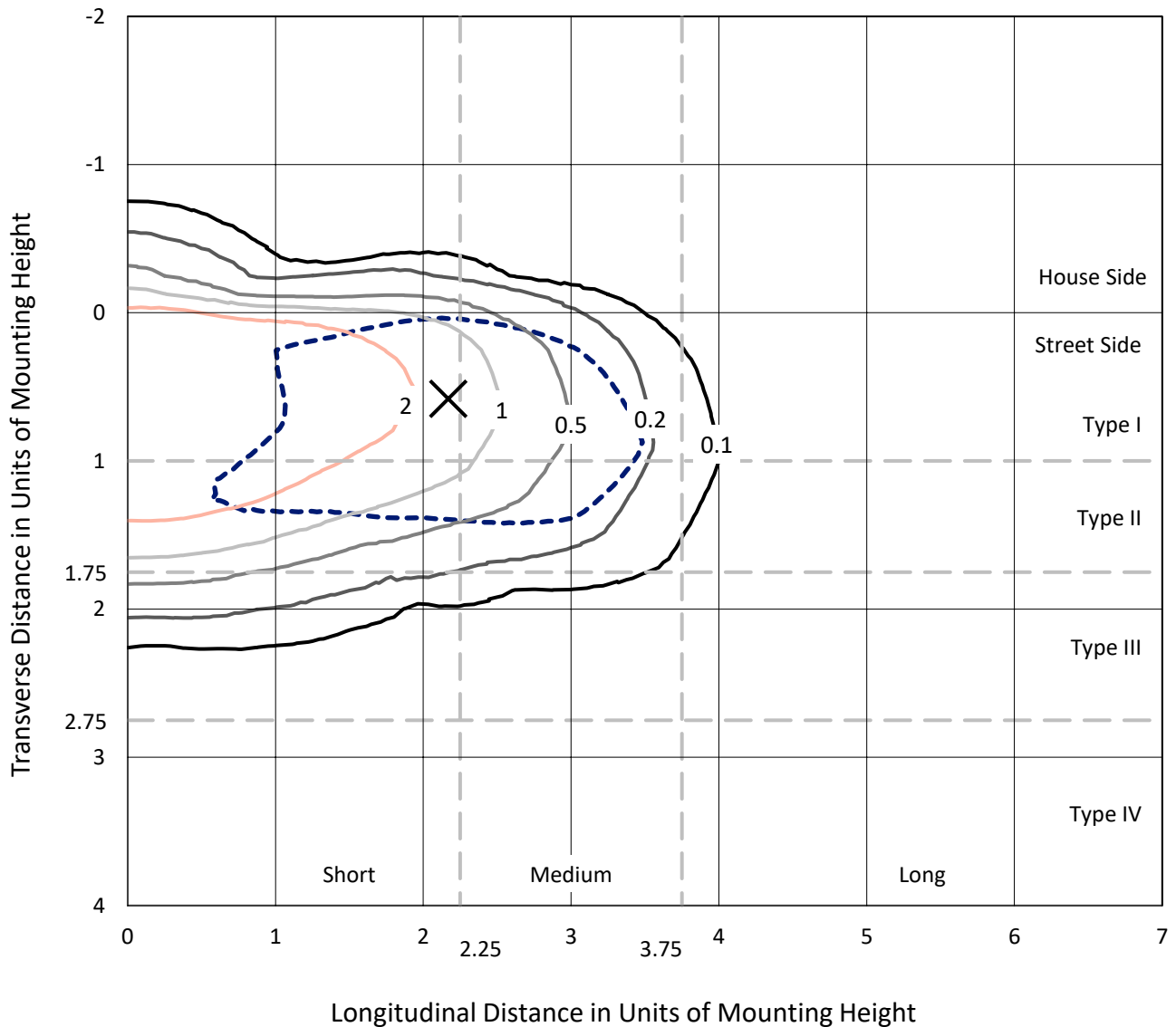
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

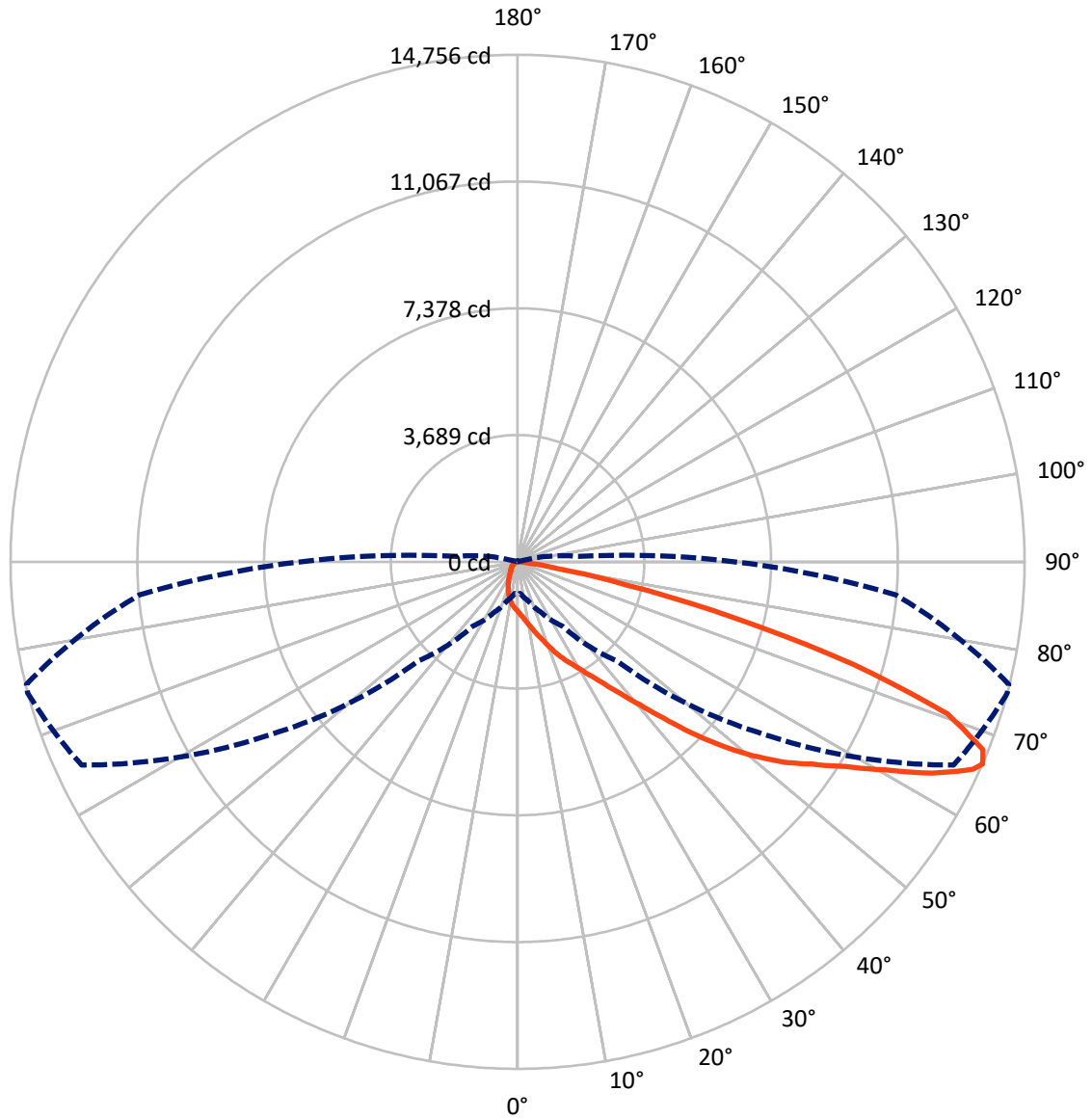
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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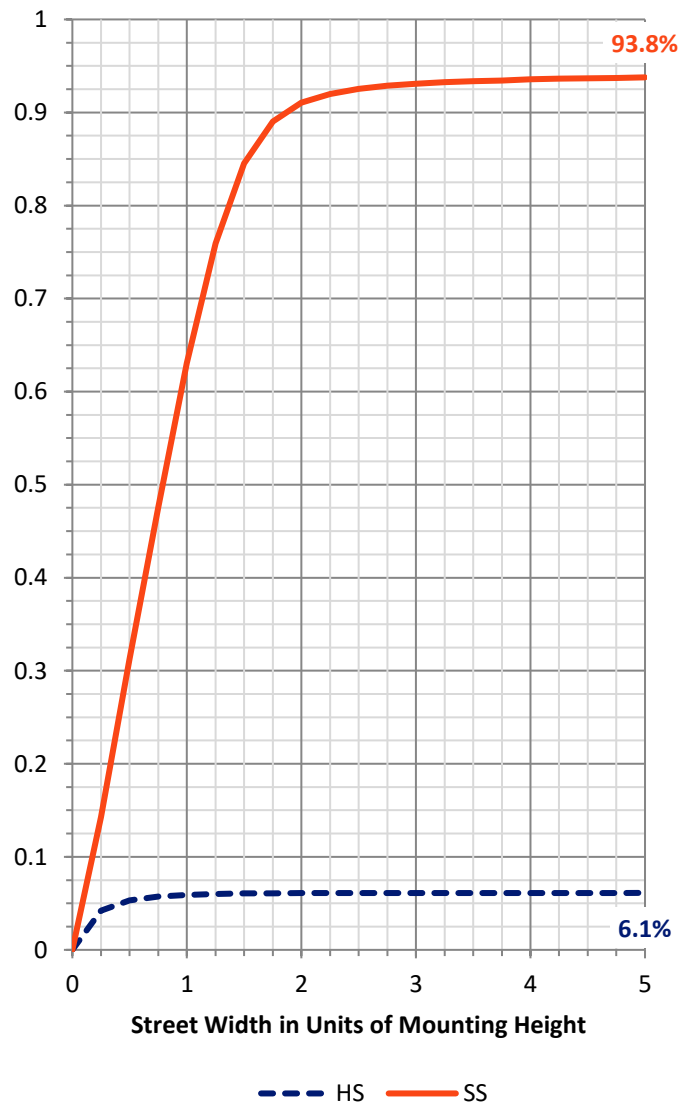
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	813.4	0.0	813.4
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	12362.9	0.0	12362.9
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	13176.3	0.0	13176.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.0	1.1
10°-20°	409.0	3.1
20°-30°	706.3	5.4
30°-40°	1274.0	9.7
40°-50°	2301.6	17.5
50°-60°	3588.2	27.2
60°-70°	3408.6	25.9
70°-80°	1277.5	9.7
80°-90°	72.1	0.5
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°	13176.3	100.0
0°-180°	13176.3	100.0

**Coefficient of Utilization**



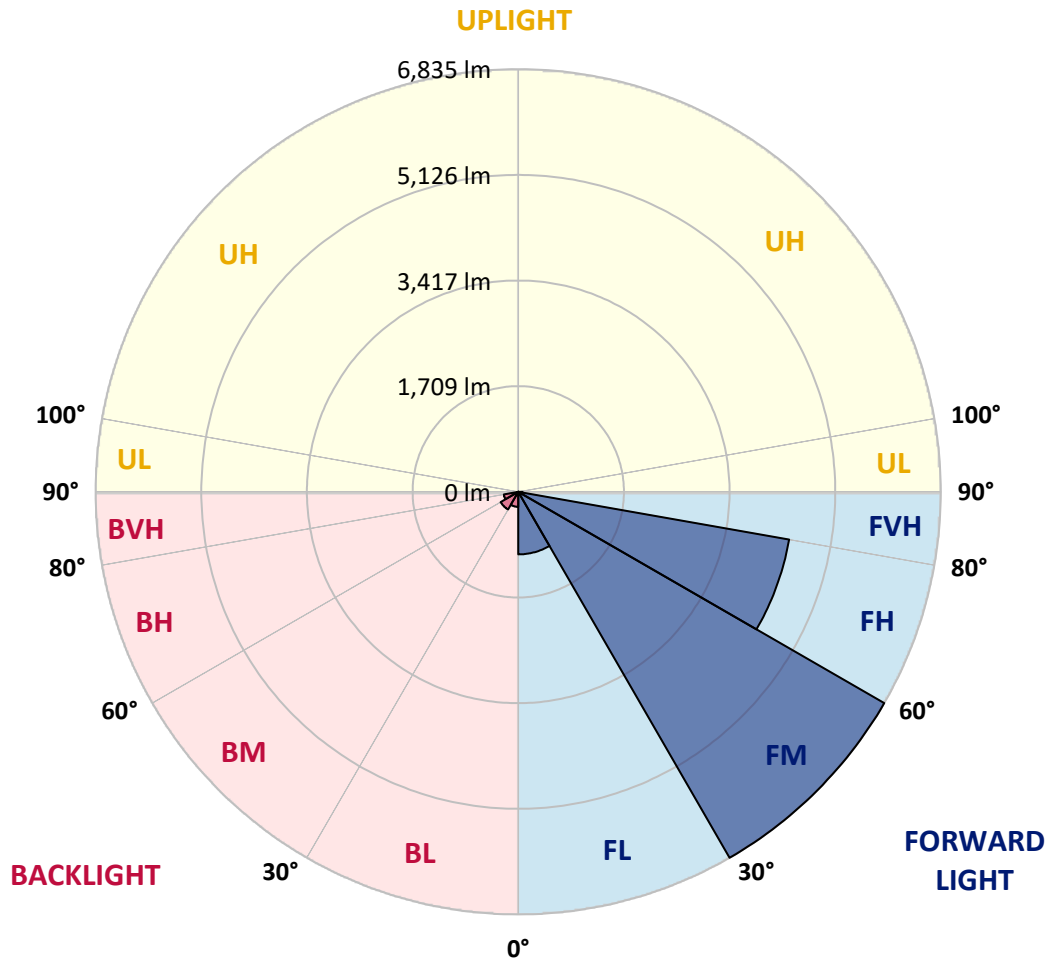
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1011.4	7.7			
FM (30°-60°)	6834.6	51.9			
FH (60°-80°)	4448.6	33.8			G2/5000
FVH (80°-90°)	68.4	0.5			G1/100
BL (0°-30°)	242.9	1.8	B1/500		
BM (30°-60°)	329.3	2.5	B1/1000		
BH (60°-80°)	237.5	1.8	B1/500		G1/500
BVH (80°-90°)	3.7	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0
2.5°	1721.6	1700.1	1706.9	1697.2	1674.8	1641.6	1612.4	1570.5	1528.7	1521.8	1475.1
5°	1948.6	1942.7	1934.9	1906.7	1891.1	1840.4	1780.0	1707.9	1621.2	1605.6	1520.8
7.5°	2103.5	2100.6	2104.5	2089.8	2076.2	2030.4	1966.1	1867.7	1733.2	1724.5	1583.2
10°	2154.1	2161.9	2176.5	2199.9	2221.4	2206.7	2158.0	2035.3	1878.4	1853.0	1654.3
12.5°	2124.9	2133.7	2168.8	2231.1	2300.3	2340.2	2320.7	2231.1	2032.4	2011.9	1734.2
15°	2049.9	2060.6	2110.3	2206.7	2330.4	2443.5	2492.2	2427.9	2211.6	2178.5	1830.7
17.5°	1938.8	1954.4	2025.5	2153.2	2322.7	2517.6	2654.9	2633.5	2402.6	2371.4	1935.9
20°	1855.0	1866.8	1927.1	2073.3	2289.6	2558.5	2809.8	2870.2	2638.3	2584.8	2059.6
22.5°	1910.6	1914.4	1934.9	2022.6	2230.1	2569.2	2946.2	3116.7	2888.7	2841.0	2188.3
25°	2182.4	2143.4	2122.9	2103.5	2217.5	2559.5	3070.0	3373.9	3138.2	3087.5	2315.9
27.5°	2611.1	2593.5	2490.3	2351.9	2325.6	2572.1	3151.8	3617.5	3372.9	3318.4	2440.6
30°	3077.7	3047.5	2984.2	2781.6	2577.9	2661.7	3211.2	3854.2	3650.7	3578.5	2554.5
32.5°	3506.4	3525.9	3431.4	3222.9	2987.1	2852.7	3288.2	4112.5	3969.2	3879.6	2687.1
35°	4006.2	4045.2	3900.0	3700.3	3424.6	3197.6	3438.2	4403.7	4373.5	4260.5	2891.7
37.5°	4513.8	4537.3	4448.5	4168.0	3919.5	3636.0	3720.8	4763.2	4871.4	4775.0	3136.2
40°	4940.6	4972.8	4907.5	4658.1	4393.0	4143.6	4131.0	5154.9	5463.8	5364.4	3500.6
42.5°	5266.9	5291.4	5293.2	5116.9	4878.2	4765.2	4654.2	5654.7	6206.1	6091.2	3923.5
45°	5679.1	5714.2	5693.7	5573.9	5395.6	5375.1	5317.6	6258.8	7094.7	6949.5	4471.9
47.5°	6316.2	6339.6	6289.0	6147.7	5966.5	5998.6	5964.6	6935.9	8000.8	7876.1	5039.9
50°	6758.6	6797.5	6869.7	6926.2	6794.6	6675.8	6574.5	7568.2	8861.1	8749.0	5620.6
52.5°	6753.7	6818.1	7046.0	7330.5	7617.9	7581.9	7290.5	8266.8	9682.4	9544.1	6166.2
55°	6298.7	6423.4	6758.6	7263.3	8059.3	8455.8	8323.3	9075.4	10391.7	10298.2	6798.6
57.5°	5359.6	5435.5	5901.2	6606.6	7812.8	8866.9	9519.7	10171.5	11242.2	11198.4	7780.6
60°	3604.9	3638.9	4238.1	5110.1	6651.4	8456.8	10396.5	11497.5	12289.6	12268.1	8927.3
62.5°	2065.5	2080.1	2514.6	3250.2	4733.1	7166.8	10470.6	13133.3	13545.4	13557.1	10254.3
65°	1111.6	1119.5	1470.2	1907.6	2880.0	5108.1	9415.4	14029.6	14560.6	14583.1	11076.6
66°	959.6	922.6	1170.1	1626.1	2291.5	4065.6	8748.1	13997.5	14755.5	14731.1	11047.3
67.5°	729.8	762.9	934.4	1250.0	1698.2	2890.7	7222.3	13374.9	14607.4	14531.4	10598.2
70°	522.2	535.9	665.5	891.4	1156.5	1586.1	4615.2	11108.7	13276.5	13174.2	9233.3
72.5°	337.1	351.7	471.5	645.0	835.9	866.2	2583.8	8026.1	10235.8	10221.2	6953.4
75°	240.6	254.3	311.8	461.8	628.4	535.9	1244.2	5409.2	6507.2	6463.4	4301.5
77.5°	174.4	181.2	208.5	302.0	449.1	383.9	576.8	2888.7	3239.5	3392.4	1900.8
80°	100.4	106.2	145.2	184.2	304.0	262.1	275.7	1159.4	1195.4	1137.9	594.3
82.5°	49.7	56.5	86.7	125.7	190.0	176.3	126.7	348.8	368.2	358.5	150.0
85°	11.7	14.6	48.7	82.8	92.6	78.9	61.4	102.3	126.7	123.7	57.5
87.5°	0.9	2.0	17.5	14.6	15.6	26.3	21.5	26.3	41.0	38.0	20.4
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°	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0	1441.0
2.5°	1453.6	1435.1	1381.5	1328.9	1285.1	1239.3	1197.4	1173.0	1163.3	1152.6	1157.4
5°	1474.1	1429.3	1321.2	1227.6	1136.0	1058.1	995.7	955.8	936.3	933.3	928.5
7.5°	1501.4	1424.4	1256.8	1110.7	990.8	904.1	833.0	775.6	758.0	742.4	729.8
10°	1534.5	1415.7	1176.9	987.9	860.3	751.1	657.6	589.4	554.4	544.7	551.5
12.5°	1569.6	1399.1	1093.1	874.9	727.8	588.5	501.7	467.7	457.9	454.0	455.0
15°	1604.6	1378.6	1005.5	765.8	579.7	469.6	429.6	420.9	417.0	415.1	413.1
17.5°	1636.8	1345.5	907.0	659.6	469.6	401.4	386.8	379.0	371.2	368.2	363.4
20°	1674.8	1307.5	818.4	540.7	397.5	363.4	345.9	331.3	319.5	311.8	310.8
22.5°	1710.9	1258.8	725.8	448.2	362.5	326.4	298.2	282.5	268.9	259.2	262.1
25°	1730.4	1199.3	643.0	390.7	330.3	289.4	258.2	238.7	224.1	219.2	218.2
27.5°	1730.4	1126.3	562.2	357.6	301.1	256.2	224.1	205.5	195.8	189.0	190.0
30°	1716.6	1045.4	487.1	332.2	275.7	227.0	196.8	180.2	172.4	167.6	166.6
32.5°	1706.0	968.4	422.8	307.9	249.4	201.7	175.4	162.7	154.9	150.0	150.0
35°	1722.5	902.2	373.2	283.5	225.0	182.2	158.8	147.1	139.3	135.5	134.4
37.5°	1766.4	841.8	335.1	257.2	202.6	165.6	147.1	133.5	125.7	120.8	118.9
40°	1874.5	807.7	306.9	232.9	181.2	152.0	133.5	120.8	111.0	106.2	105.2
42.5°	2047.9	808.7	279.6	210.5	164.7	140.3	121.8	107.2	96.5	91.6	90.6
45°	2309.1	845.6	258.2	189.0	150.0	127.6	109.2	93.6	83.8	78.9	78.9
47.5°	2621.8	917.8	239.7	170.5	136.4	116.0	96.5	80.9	71.1	67.3	67.3
50°	2960.8	1011.3	221.2	151.0	124.7	103.3	82.8	70.2	62.3	59.4	59.4
52.5°	3306.7	1124.3	202.6	135.5	112.0	89.7	71.1	62.3	55.5	53.6	52.6
55°	3760.7	1268.5	183.1	118.9	98.4	77.0	63.3	54.6	46.7	43.8	42.8
57.5°	4459.3	1485.7	161.8	104.2	80.9	64.3	54.6	45.8	37.0	32.2	31.2
60°	5302.0	1750.8	139.3	91.6	65.3	52.6	43.8	35.1	27.2	21.5	20.4
62.5°	6091.2	1919.4	117.9	77.0	51.6	39.9	31.2	26.3	19.5	13.6	12.7
65°	6440.0	1862.8	97.4	62.3	41.0	28.3	20.4	18.5	11.7	5.9	4.9
66°	6324.1	1779.1	89.7	56.5	37.0	24.4	17.5	15.6	8.8	2.9	2.9
67.5°	5982.1	1581.3	77.9	48.7	32.2	19.5	13.6	11.7	4.9	0.9	0.0
70°	5125.7	1279.3	61.4	36.0	23.4	13.6	7.8	5.9	2.9	0.0	0.0
72.5°	3937.1	952.8	48.7	27.2	16.6	7.8	3.9	2.0	2.9	0.0	0.0
75°	2412.3	544.7	38.0	20.4	10.7	4.9	2.9	0.0	2.9	0.9	0.0
77.5°	1070.8	244.5	25.4	13.6	7.8	3.9	2.0	0.0	2.0	0.9	0.0
80°	270.8	79.9	14.6	9.7	5.9	2.9	0.9	0.0	2.0	2.0	0.9
82.5°	74.1	29.2	10.7	7.8	4.9	2.9	0.9	0.0	2.0	2.0	2.0
85°	29.2	13.6	9.7	7.8	5.9	2.9	0.9	0.0	2.0	2.0	2.0
87.5°	13.6	9.7	9.7	8.8	6.8	2.9	0.9	0.0	2.0	0.9	2.0
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)