

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: P322989

Luminaire Tested: **GLEON-SA5A-827-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P322989  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA5A-827-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12410 lumens  
Efficiency: N/A  
Efficacy: 76.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

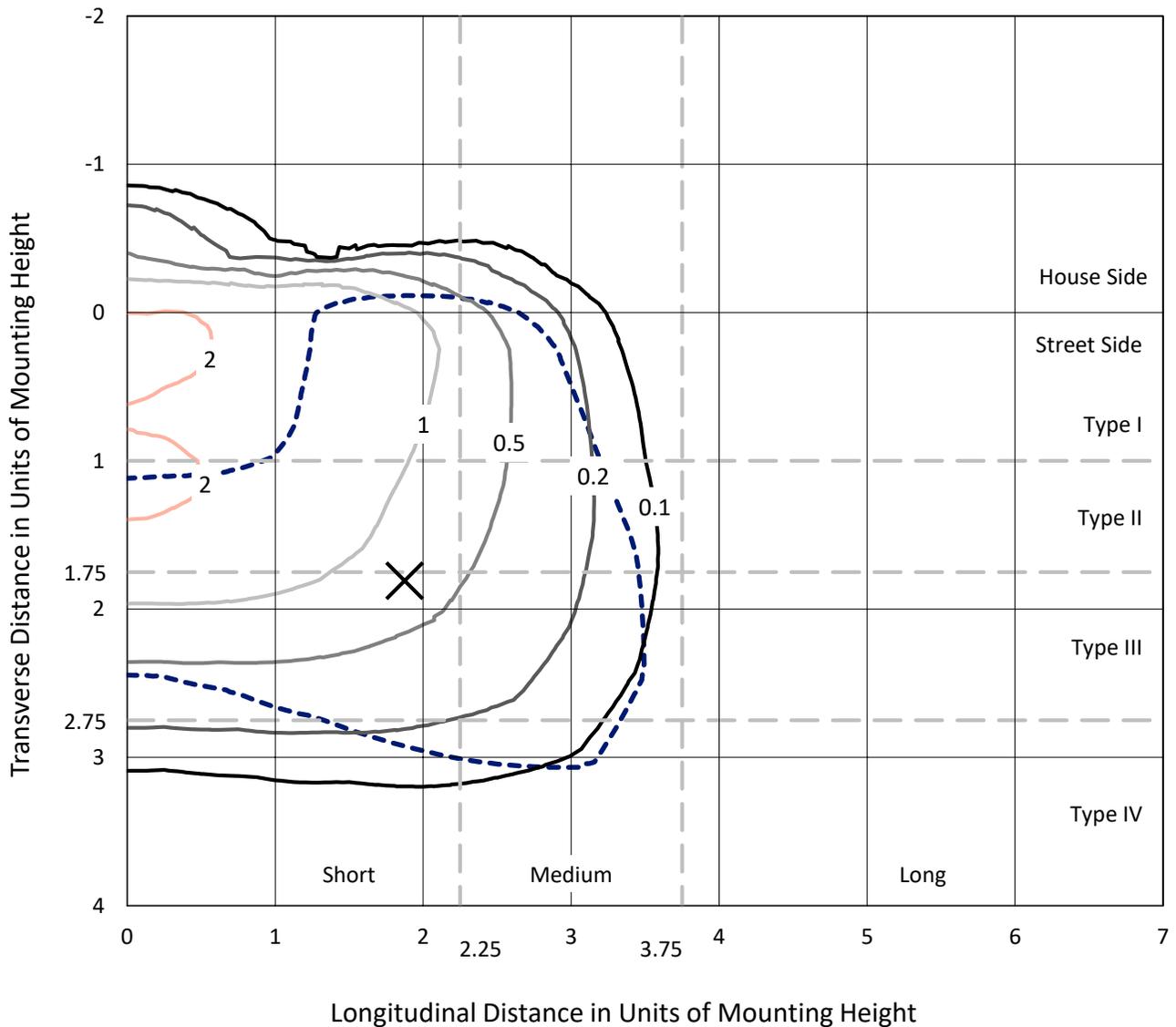
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

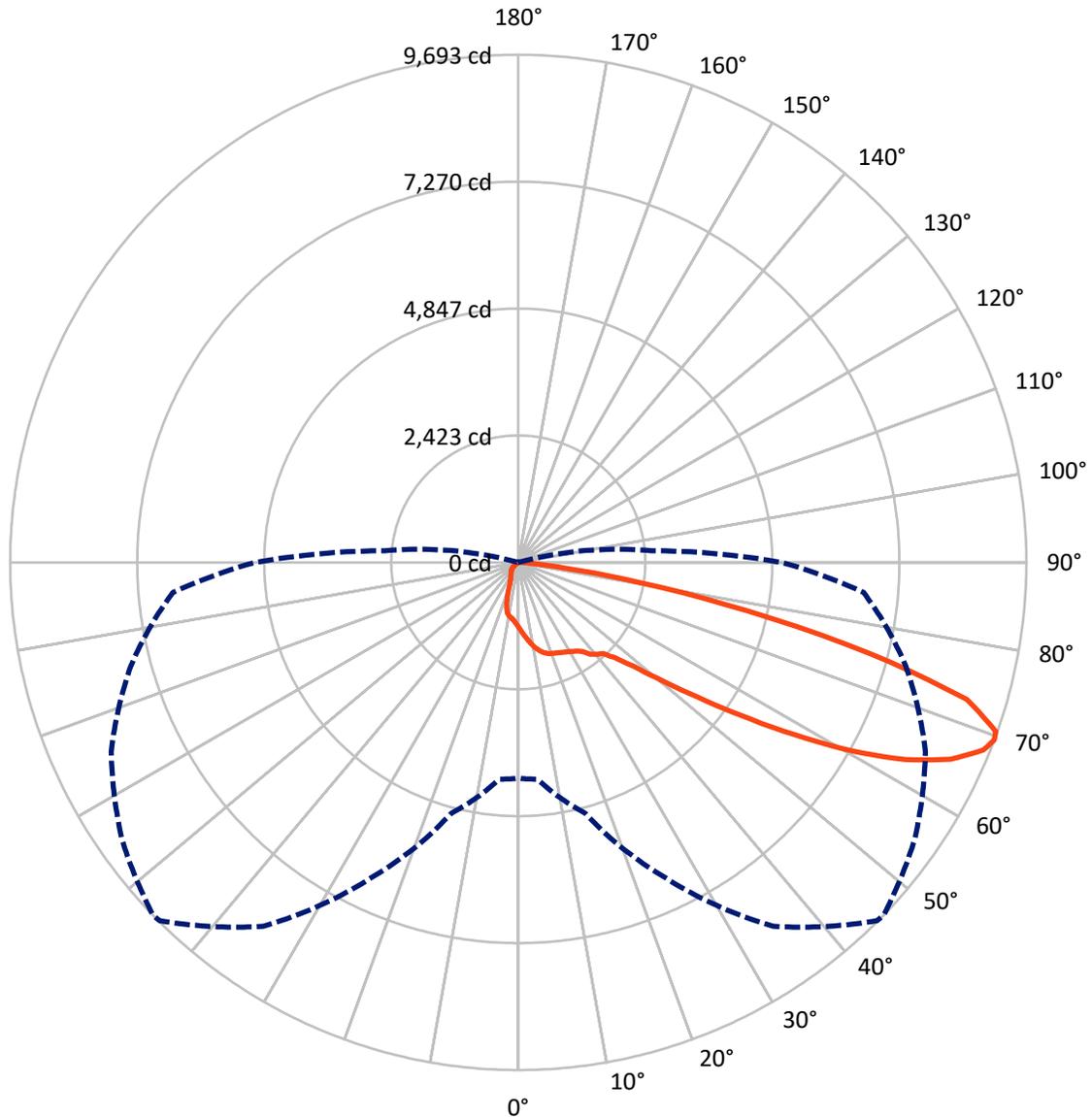
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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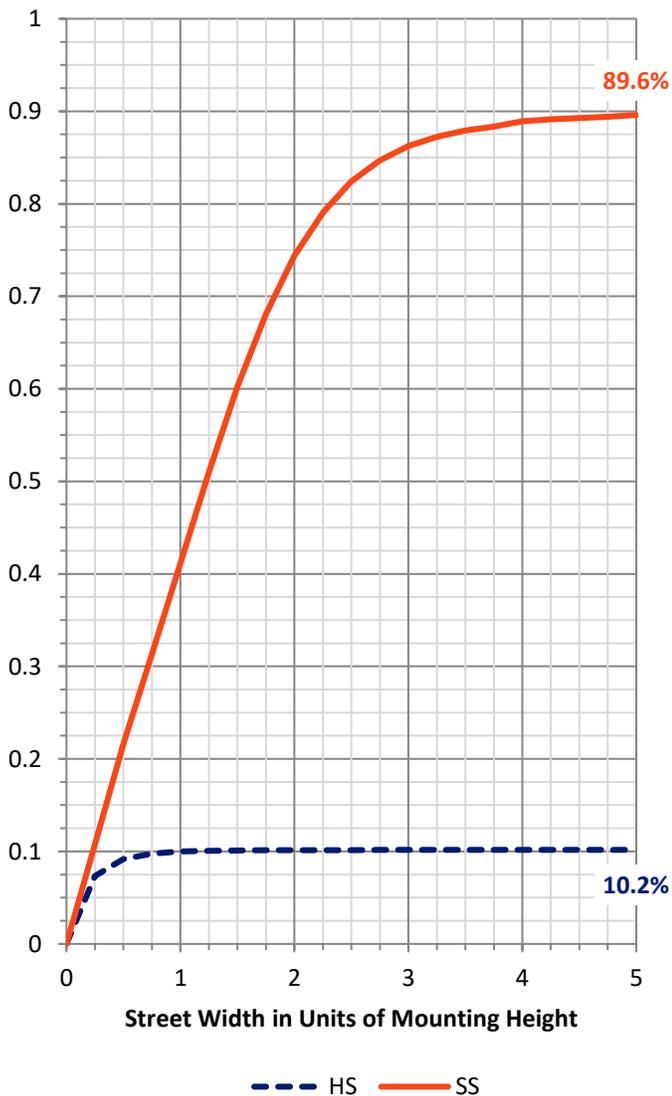
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1273.6	0.0	1273.6
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	11136.4	0.0	11136.4
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	12410.0	0.0	12410.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.8	1.0
10°-20°	375.5	3.0
20°-30°	590.5	4.8
30°-40°	846.8	6.8
40°-50°	1463.5	11.8
50°-60°	2891.4	23.3
60°-70°	4040.9	32.6
70°-80°	1952.2	15.7
80°-90°	125.5	1.0
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°	12410.0	100.0
0°-180°	12410.0	100.0

**Coefficient of Utilization**



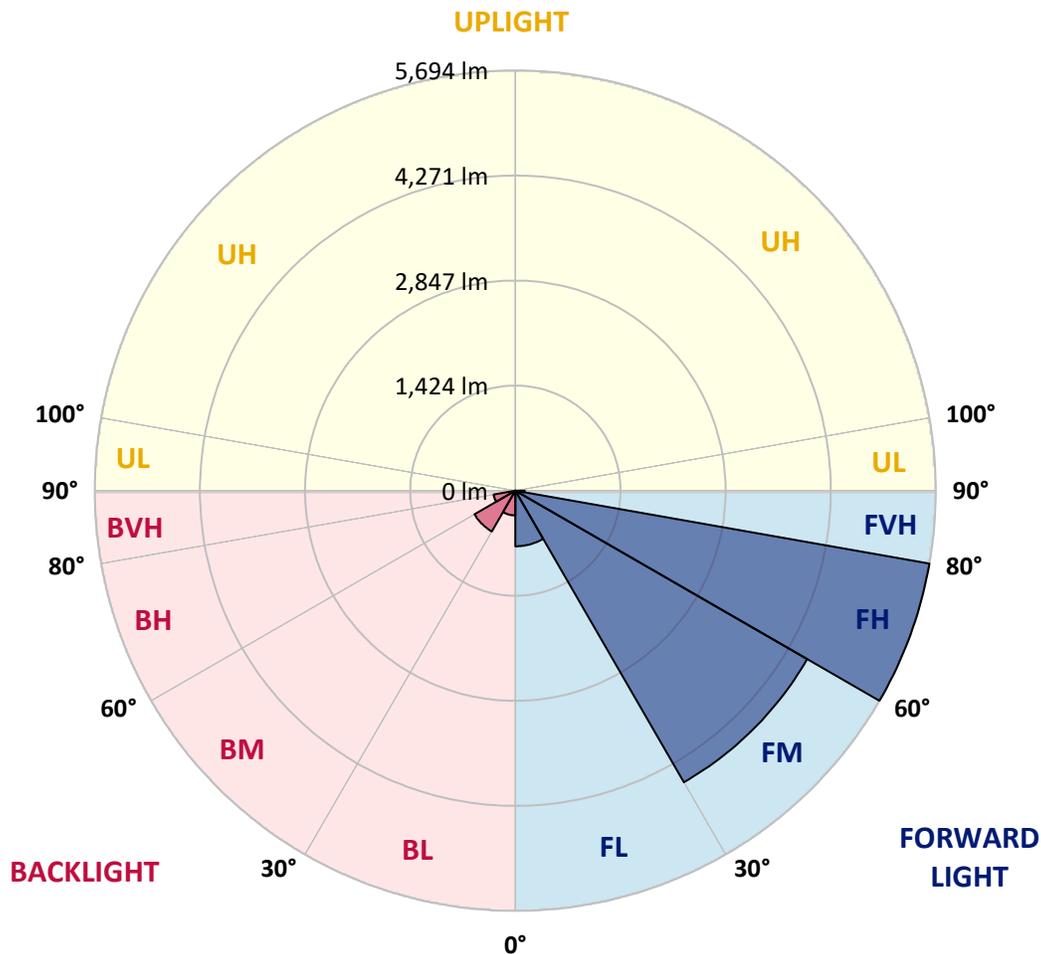
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	754.1	6.1			
FM (30°-60°)	4563.4	36.8			
FH (60°-80°)	5694.5	45.9			G3/7500
FVH (80°-90°)	124.4	1.0			G2/225
BL (0°-30°)	335.7	2.7	B1/500		
BM (30°-60°)	638.2	5.1	B1/1000		
BH (60°-80°)	298.6	2.4	B1/500		G1/500
BVH (80°-90°)	1.1	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-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4
2.5°	1381.3	1379.6	1371.4	1368.0	1348.2	1336.5	1331.9	1317.3	1296.4	1275.4	1252.2
5°	1538.4	1537.9	1522.7	1508.2	1470.9	1436.0	1429.6	1395.9	1348.8	1304.5	1260.3
7.5°	1699.0	1691.5	1676.3	1648.4	1594.3	1538.4	1533.2	1485.5	1418.6	1354.6	1291.1
10°	1835.2	1830.5	1810.7	1768.3	1704.9	1641.4	1635.0	1576.3	1500.6	1422.1	1341.2
12.5°	1941.1	1937.6	1911.4	1858.5	1791.0	1725.2	1716.5	1664.1	1583.2	1495.4	1400.0
15°	2005.7	2003.9	1971.9	1915.5	1849.2	1792.1	1784.6	1738.6	1663.5	1571.6	1464.0
17.5°	2020.8	2021.4	1988.2	1931.2	1876.5	1835.8	1830.0	1795.0	1732.2	1640.8	1528.0
20°	1987.1	1994.0	1964.4	1914.9	1881.2	1859.6	1855.0	1834.0	1781.1	1695.0	1579.2
22.5°	1939.3	1942.8	1922.5	1889.3	1875.3	1879.4	1877.1	1865.4	1820.6	1741.5	1629.8
25°	1910.2	1910.2	1898.0	1870.1	1879.4	1904.4	1905.0	1902.7	1867.2	1798.5	1691.5
27.5°	1909.1	1905.6	1891.6	1870.7	1896.3	1934.7	1937.0	1952.7	1930.6	1867.8	1768.3
30°	1955.6	1951.6	1921.9	1894.5	1927.1	1968.4	1974.3	2008.6	1997.5	1942.8	1853.8
32.5°	2064.4	2049.9	1984.1	1939.3	1963.8	2013.2	2020.8	2075.5	2093.0	2035.3	1936.4
35°	2213.4	2167.4	2072.6	2024.3	2026.6	2078.4	2085.4	2165.7	2217.5	2120.3	2000.4
37.5°	2418.8	2396.1	2241.9	2112.7	2123.2	2201.8	2222.1	2309.4	2294.9	2166.8	2073.2
40°	2869.2	2833.7	2669.6	2360.6	2215.7	2301.8	2308.2	2354.8	2356.0	2272.2	2224.5
42.5°	3482.4	3467.9	3295.1	2810.4	2397.8	2368.8	2380.4	2458.9	2546.8	2494.4	2492.1
45°	4161.5	4153.9	3970.6	3407.4	2766.2	2588.1	2602.7	2708.0	2876.1	2887.8	2961.7
47.5°	4707.8	4704.3	4599.0	4073.6	3330.0	2959.9	2964.6	3076.3	3371.9	3517.9	3636.0
50°	5205.9	5222.8	5139.6	4794.5	4098.0	3542.4	3531.3	3605.8	4080.6	4319.7	4466.4
52.5°	5898.3	5922.2	5688.8	5467.2	4903.9	4265.0	4256.3	4334.3	4932.4	5111.6	5137.8
55°	6509.9	6469.1	6284.7	6220.7	5886.7	5157.6	5155.3	5223.9	5756.3	5832.6	5880.9
57.5°	6779.8	6764.1	6853.2	6999.8	6916.0	6212.5	6207.3	6154.9	6493.6	6501.7	6650.1
60°	6950.3	6969.5	7242.4	7694.5	7903.4	7347.7	7314.0	6994.5	7197.6	7179.6	7338.4
62.5°	6822.3	6860.1	7351.2	8104.7	8642.4	8338.6	8290.9	7763.8	7799.3	7737.0	7884.8
65°	6142.7	6201.5	7006.2	8027.3	9008.9	9113.1	9064.8	8442.8	8277.0	8174.6	8092.5
67.5°	4987.7	5022.6	5862.8	7354.1	8843.7	9575.1	9565.2	9038.0	8637.7	8100.7	7464.1
69°	4121.9	4156.2	4965.0	6645.4	8480.0	9674.0	9693.2	9228.9	8569.1	7651.5	6613.4
70°	3491.2	3527.8	4281.3	6038.0	8058.2	9628.0	9662.4	9210.8	8372.4	7131.3	5866.9
72.5°	1831.1	1862.5	2635.8	4159.7	6569.2	8840.8	8944.9	8432.3	7097.0	5179.1	3469.1
75°	575.5	593.5	1029.3	2174.4	4497.8	6874.1	6898.0	6614.6	5039.5	2848.8	1444.8
77.5°	219.4	214.1	342.7	801.2	2273.9	4328.5	4474.5	4133.5	2644.6	1007.2	333.4
80°	118.1	118.7	178.0	331.7	972.9	2224.5	2347.8	2003.3	939.7	314.2	76.8
82.5°	51.2	53.5	100.1	175.7	446.9	820.4	882.1	734.3	359.0	211.2	28.5
85°	11.1	12.2	48.3	95.4	182.1	230.4	241.5	238.0	228.7	164.1	11.1
87.5°	0.0	0.0	21.5	34.3	46.0	52.4	46.0	59.9	126.3	110.6	5.8
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°	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4	1243.4
2.5°	1244.6	1234.1	1216.1	1196.3	1182.3	1167.8	1156.2	1150.9	1145.1	1141.0	1146.3
5°	1242.3	1221.9	1187.0	1153.2	1128.8	1109.0	1092.7	1086.3	1079.9	1075.3	1074.7
7.5°	1262.6	1234.1	1180.6	1131.1	1093.3	1066.6	1044.4	1035.1	1027.6	1024.1	1021.2
10°	1301.6	1265.0	1193.4	1128.8	1079.9	1034.5	986.8	950.2	926.3	915.3	911.2
12.5°	1352.2	1306.3	1217.8	1141.0	1070.0	982.8	881.5	794.2	737.8	719.2	708.1
15°	1411.6	1354.6	1249.8	1156.7	1034.0	874.5	702.9	588.8	536.5	526.0	514.4
17.5°	1468.6	1405.8	1288.2	1159.6	954.8	698.8	514.9	437.6	417.2	424.2	425.9
20°	1518.7	1456.4	1326.1	1134.0	811.1	524.3	398.6	379.4	386.9	400.3	402.6
22.5°	1569.3	1505.3	1361.0	1066.6	627.2	398.0	359.0	363.7	371.2	384.6	386.9
25°	1631.0	1564.6	1393.6	942.6	470.7	338.6	341.0	348.0	355.5	367.7	368.9
27.5°	1701.9	1639.7	1415.1	781.4	349.1	311.3	318.9	329.3	336.9	348.5	350.9
30°	1796.2	1738.6	1422.1	614.4	292.7	286.9	290.3	303.1	314.2	324.7	326.4
32.5°	1884.6	1836.4	1398.8	463.7	271.1	264.2	264.2	271.7	284.5	294.4	296.7
35°	1966.1	1934.7	1324.3	339.2	254.9	243.2	237.4	237.4	245.5	253.7	256.0
37.5°	2073.8	2072.6	1203.9	270.6	239.1	225.8	213.5	204.2	201.3	203.1	204.2
40°	2258.2	2259.9	1046.8	242.6	225.8	207.7	189.1	172.2	156.5	151.3	150.7
42.5°	2546.2	2520.0	882.1	229.3	214.1	189.1	161.2	138.5	114.0	106.5	105.9
45°	3003.6	2848.2	707.5	217.0	201.9	168.2	133.2	102.4	82.6	76.8	76.8
47.5°	3669.8	3279.4	548.1	203.7	185.6	144.3	100.7	73.9	60.5	57.6	58.2
50°	4358.7	3701.8	420.1	186.8	165.8	119.3	74.5	53.5	46.0	46.0	46.5
52.5°	4969.7	4011.3	327.6	168.7	141.4	93.7	56.4	41.9	38.4	37.8	38.4
55°	5541.6	4210.9	250.8	147.8	112.3	69.8	43.1	34.3	32.0	30.8	30.3
57.5°	6093.2	4309.8	187.9	119.3	81.5	50.6	34.3	29.1	26.8	25.0	24.4
60°	6460.4	4229.5	129.2	87.9	56.4	36.7	28.5	25.0	22.1	20.4	19.8
62.5°	6667.5	4010.2	83.2	63.4	40.1	27.3	22.7	20.9	16.9	15.1	15.1
65°	6583.8	3648.3	58.2	45.4	29.1	20.4	16.9	16.9	12.2	9.9	9.3
67.5°	5834.3	3082.1	44.2	33.7	20.9	15.1	12.8	14.5	7.6	4.7	4.7
69°	5019.7	2554.4	37.8	27.9	17.5	12.2	11.1	13.4	5.2	3.5	2.9
70°	4362.8	2203.5	34.3	24.4	14.5	10.5	9.9	12.8	5.2	2.9	2.3
72.5°	2610.2	1228.9	26.2	17.5	9.3	8.1	8.1	14.5	5.2	2.9	2.3
75°	1054.9	432.9	19.2	12.2	7.0	7.0	9.9	18.6	4.7	2.3	1.7
77.5°	239.1	94.8	11.1	7.6	4.7	7.0	11.6	14.5	2.9	1.2	0.0
80°	58.2	23.3	7.0	4.7	2.9	5.2	8.7	8.1	0.6	0.0	0.0
82.5°	19.2	8.1	2.9	2.3	0.6	1.7	4.1	2.3	0.0	0.0	0.0
85°	8.1	4.7	1.2	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.0
87.5°	5.2	1.7	0.0	0.0	0.0	0.0	0.0	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)