

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: P190872

Luminaire Tested: **GLEON-AF-04-LED-E1-5WQ-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190872  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-04-LED-E1-5WQ-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17046.5 lumens  
Efficiency: N/A  
Efficacy: 132.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2

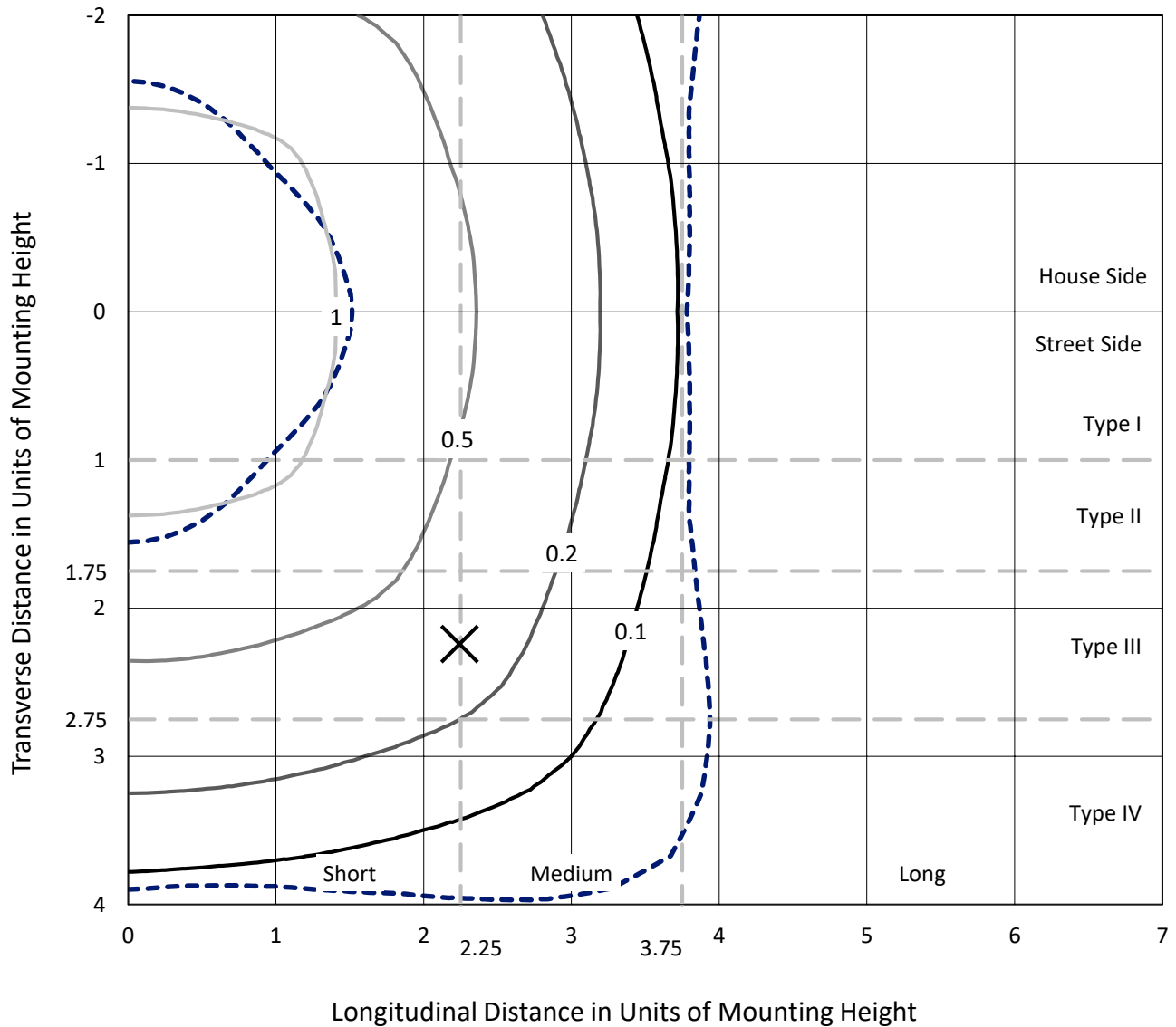
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

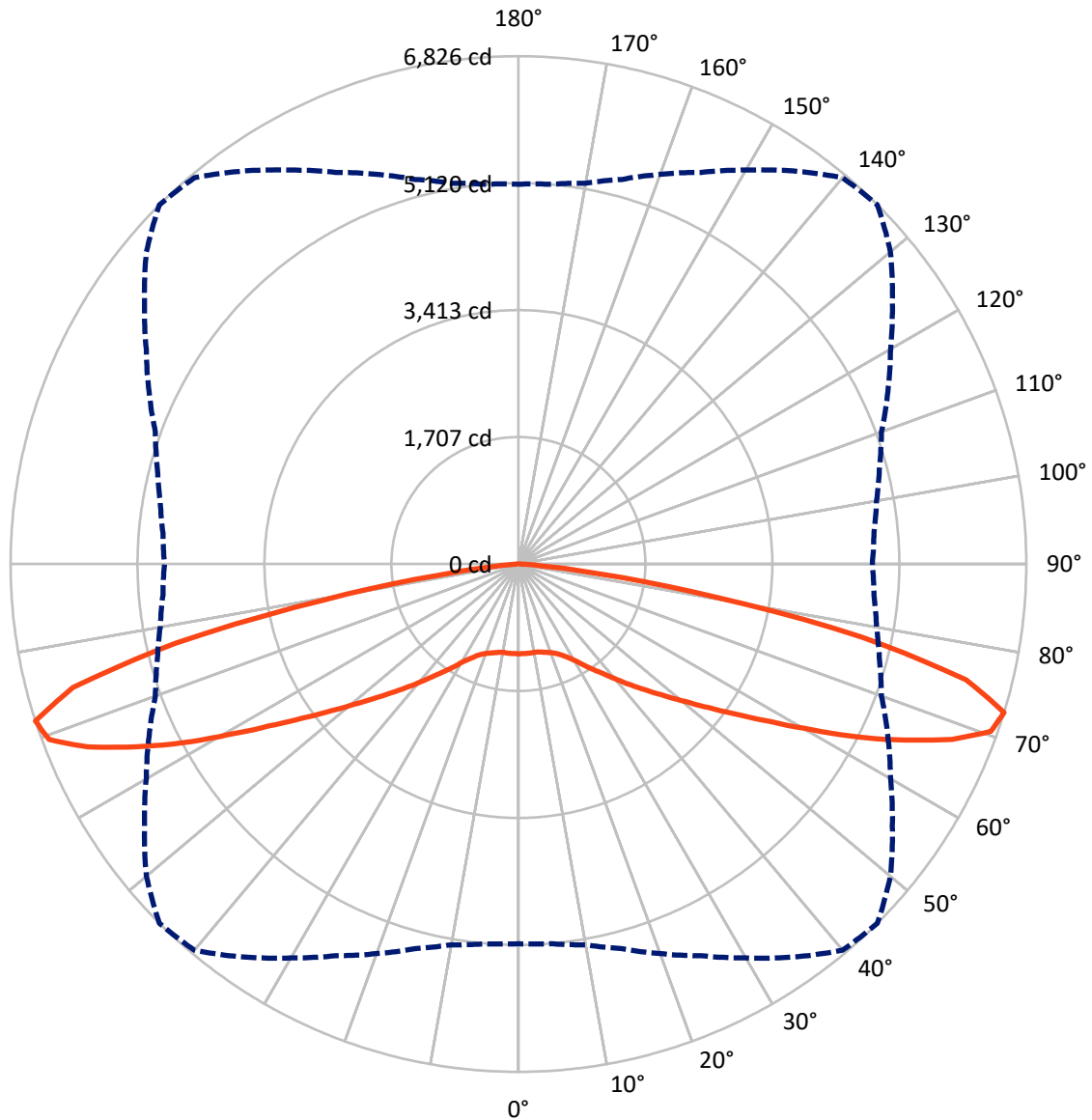
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8523.2	0.0	8523.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	8523.2	0.0	8523.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	17046.5	0.0	17046.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.3	0.7
10°-20°	350.1	2.1
20°-30°	639.8	3.8
30°-40°	1103.0	6.5
40°-50°	1885.6	11.1
50°-60°	3056.4	17.9
60°-70°	5070.4	29.7
70°-80°	4465.8	26.2
80°-90°	360.1	2.1
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°	17046.5	100.0
0°-180°	17046.5	100.0



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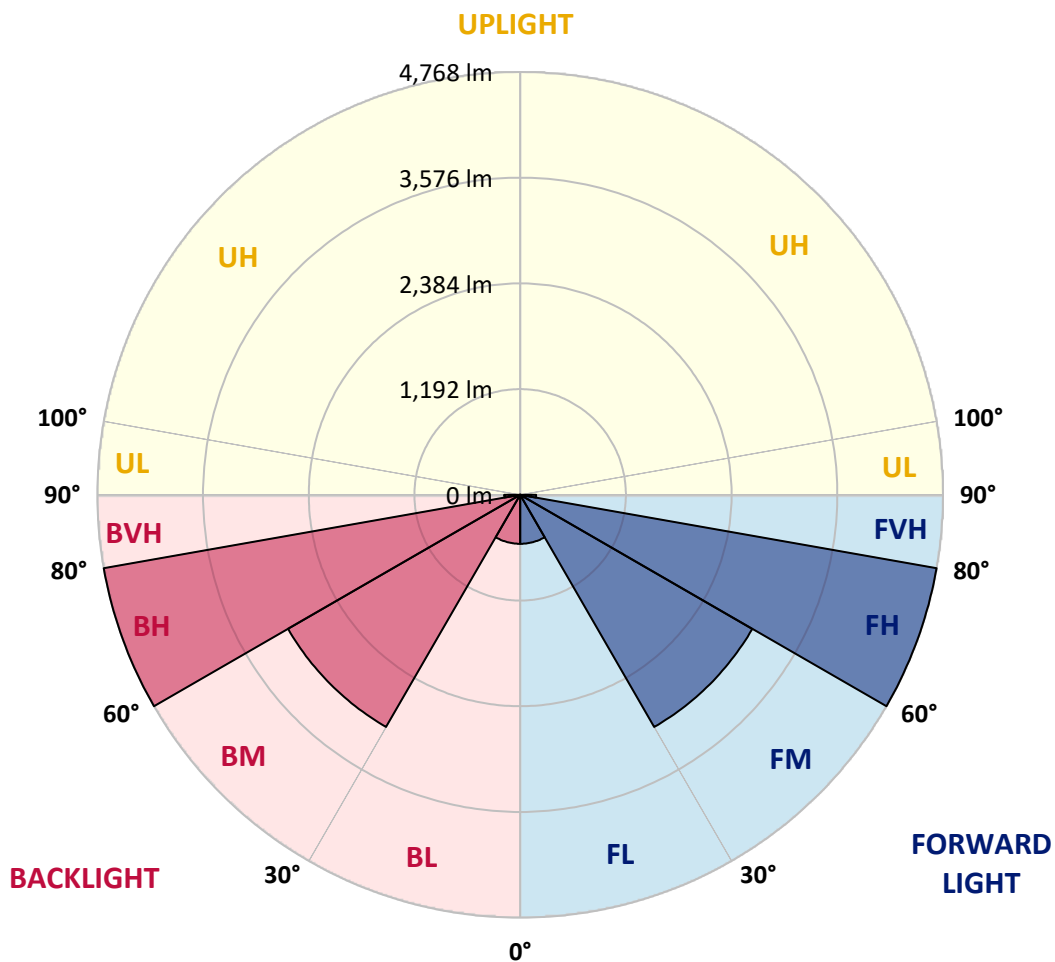
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	552.6	3.2			
FM	(30°-60°)	3022.5	17.7			
FH	(60°-80°)	4768.1	28.0			G2/5000
FVH	(80°-90°)	180.0	1.1			G2/225
BL	(0°-30°)	552.6	3.2	B2/1000		
BM	(30°-60°)	3022.5	17.7	B3/5000		
BH	(60°-80°)	4768.1	28.0	B4/5000		G2/5000
BVH	(80°-90°)	180.0	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1207.2	1207.2	1207.2	1207.2	1207.2	1207.2	1207.2	1207.2	1207.2	1207.2	1207.2
2.5°	1207.2	1207.9	1208.7	1207.9	1207.9	1207.2	1206.4	1207.2	1206.4	1204.8	1205.5
5°	1211.1	1212.6	1212.6	1211.1	1211.9	1211.1	1209.5	1210.3	1208.7	1206.4	1206.4
7.5°	1215.8	1216.5	1216.5	1215.0	1215.8	1214.1	1212.6	1211.9	1210.3	1207.2	1204.8
10°	1222.8	1223.6	1222.8	1221.2	1221.2	1218.8	1215.0	1213.4	1210.3	1205.5	1203.2
12.5°	1230.6	1231.4	1230.6	1229.1	1228.3	1224.4	1221.2	1218.8	1216.5	1212.6	1208.7
15°	1241.6	1243.1	1241.6	1238.4	1236.0	1233.0	1231.4	1232.1	1233.0	1229.8	1225.9
17.5°	1261.9	1262.6	1260.3	1253.3	1250.1	1247.0	1247.0	1248.6	1251.0	1249.3	1245.4
20°	1299.5	1297.1	1291.6	1283.0	1279.1	1273.6	1272.9	1273.6	1273.6	1272.9	1269.7
22.5°	1346.3	1344.8	1337.7	1326.8	1321.3	1318.2	1313.5	1309.6	1308.8	1306.4	1303.3
25°	1402.6	1401.9	1393.3	1383.8	1380.0	1376.1	1372.1	1366.7	1362.0	1356.5	1353.4
27.5°	1474.6	1471.4	1458.9	1454.2	1448.7	1446.4	1440.9	1434.7	1430.8	1423.7	1419.9
30°	1553.6	1553.6	1543.3	1541.8	1541.8	1536.3	1530.0	1519.1	1512.0	1505.1	1502.7
32.5°	1632.4	1633.2	1623.1	1626.2	1628.5	1632.4	1634.1	1630.2	1625.5	1624.7	1619.9
35°	1746.6	1743.5	1733.3	1735.6	1734.9	1734.1	1734.1	1742.7	1744.2	1745.9	1736.5
37.5°	1888.2	1888.2	1877.9	1877.9	1873.2	1868.6	1862.3	1867.8	1876.4	1878.8	1872.5
40°	2050.0	2055.4	2042.9	2042.1	2043.8	2028.8	2021.9	2030.5	2035.9	2045.3	2038.2
42.5°	2240.8	2236.8	2224.3	2222.8	2214.2	2209.5	2203.2	2210.3	2218.9	2225.1	2227.5
45°	2423.7	2420.6	2406.5	2406.5	2397.9	2394.0	2397.1	2408.8	2412.7	2421.3	2429.9
47.5°	2604.3	2600.3	2591.0	2594.9	2595.7	2602.7	2612.9	2623.9	2634.8	2646.5	2650.5
50°	2788.8	2789.6	2779.5	2788.8	2800.5	2820.1	2847.5	2865.4	2888.1	2902.9	2907.6
52.5°	2956.9	2960.0	2971.0	2992.8	3016.3	3054.6	3101.6	3145.4	3182.8	3207.9	3206.3
55°	3158.6	3163.3	3189.9	3227.4	3265.8	3323.6	3393.1	3470.6	3533.1	3569.1	3546.4
57.5°	3416.7	3426.8	3456.4	3507.3	3564.4	3639.5	3734.8	3851.3	3948.3	3996.8	3959.9
60°	3770.8	3777.0	3813.0	3869.3	3938.1	4031.1	4158.6	4314.9	4451.8	4515.9	4473.7
62.5°	4237.6	4249.2	4278.2	4335.3	4405.6	4511.2	4666.8	4862.2	5032.7	5121.8	5026.4
65°	4795.0	4832.5	4856.8	4914.7	4980.3	5092.0	5254.7	5464.3	5647.2	5705.8	5595.6
67.5°	5347.0	5379.8	5422.0	5488.4	5554.9	5680.9	5831.7	6035.0	6235.9	6289.1	6117.9
70°	5588.6	5607.3	5673.0	5763.7	5891.2	6039.7	6214.0	6442.3	6690.9	6734.7	6517.4
72.5°	5104.6	5123.3	5196.9	5350.9	5572.9	5809.0	6113.2	6448.6	6776.9	6826.3	6526.7
75°	3860.7	3830.2	3938.9	4143.0	4442.4	4771.6	5196.9	5677.7	6152.2	6214.0	5856.7
77.5°	1995.3	1991.4	2073.4	2326.7	2684.0	3058.5	3526.8	4070.2	4534.6	4722.2	4431.4
80°	562.1	568.4	607.5	733.4	942.1	1212.6	1578.5	2087.5	2467.5	2661.4	2498.8
82.5°	220.4	237.6	252.6	276.0	303.3	343.2	458.2	681.8	914.7	1093.0	895.2
85°	79.0	84.4	119.6	141.5	143.8	151.7	172.8	201.7	243.2	290.1	238.4
87.5°	29.7	32.8	38.4	63.3	62.5	57.1	69.6	72.7	54.7	50.0	61.8
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1207.2	1207.2	1207.2	1207.2	1207.2	1207.2	1207.2	1207.2
2.5°	1204.0	1204.8	1204.8	1205.5	1206.4	1206.4	1207.9	1207.9
5°	1204.8	1204.8	1203.2	1204.0	1203.2	1203.2	1204.0	1204.0
7.5°	1203.2	1202.5	1200.9	1200.1	1198.6	1198.6	1198.6	1198.6
10°	1200.9	1200.1	1198.6	1197.8	1197.0	1197.0	1197.0	1197.0
12.5°	1207.2	1204.8	1203.2	1202.5	1202.5	1202.5	1202.5	1202.5
15°	1223.6	1218.1	1214.1	1214.1	1215.0	1216.5	1216.5	1218.1
17.5°	1243.9	1237.7	1233.8	1230.6	1232.1	1234.5	1236.0	1237.7
20°	1268.2	1265.0	1259.6	1256.4	1256.4	1259.6	1261.1	1261.9
22.5°	1301.7	1299.5	1297.1	1293.1	1293.1	1294.7	1297.8	1297.8
25°	1351.8	1350.2	1348.7	1345.6	1344.8	1344.8	1346.3	1347.8
27.5°	1414.3	1415.2	1413.5	1412.8	1410.4	1409.6	1412.0	1411.3
30°	1498.0	1501.9	1505.8	1502.7	1498.8	1496.5	1494.1	1491.0
32.5°	1611.4	1606.6	1603.6	1598.1	1591.0	1584.8	1580.0	1574.6
35°	1718.5	1710.7	1707.5	1712.2	1711.4	1707.5	1702.1	1697.4
37.5°	1849.8	1848.3	1849.8	1858.4	1856.9	1860.7	1849.8	1849.1
40°	2015.6	2017.2	2028.1	2038.2	2043.8	2049.2	2042.9	2036.7
42.5°	2207.9	2207.1	2211.0	2225.1	2234.5	2240.8	2227.5	2225.8
45°	2411.2	2405.7	2408.8	2420.6	2429.9	2437.0	2422.1	2422.1
47.5°	2634.8	2625.4	2615.3	2628.6	2634.0	2638.7	2626.9	2623.1
50°	2884.2	2864.7	2842.8	2848.2	2848.2	2846.7	2831.8	2831.0
52.5°	3170.3	3134.4	3094.5	3079.7	3071.0	3061.7	3035.9	3023.3
55°	3499.5	3445.5	3383.0	3344.7	3324.4	3298.6	3255.5	3243.9
57.5°	3884.1	3799.8	3691.8	3644.9	3599.6	3557.3	3509.6	3496.3
60°	4340.0	4215.7	4072.6	3985.8	3936.5	3895.9	3846.6	3844.2
62.5°	4848.2	4651.9	4490.0	4411.9	4376.0	4340.0	4293.0	4299.4
65°	5365.0	5160.1	5008.5	4945.1	4911.5	4881.8	4834.9	4841.9
67.5°	5874.7	5686.3	5519.7	5454.9	5417.3	5379.8	5337.6	5344.6
70°	6240.6	6006.9	5819.2	5675.3	5585.4	5483.8	5418.2	5401.7
72.5°	6135.9	5775.4	5477.5	5192.2	5024.8	4888.8	4796.5	4756.7
75°	5310.2	4817.7	4434.6	4084.3	3887.3	3727.0	3610.5	3537.8
77.5°	3943.6	3390.1	2937.4	2534.0	2214.9	2000.7	1849.8	1752.1
80°	2158.6	1641.8	1200.1	843.6	620.0	515.3	455.0	426.1
82.5°	672.4	433.9	319.8	276.0	256.5	245.5	227.5	198.6
85°	214.2	187.6	174.3	166.5	158.8	138.4	95.3	86.7
87.5°	82.9	85.2	84.4	79.8	81.3	58.6	47.0	41.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)