

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: P459030

Luminaire Tested: **GALN-SA5B-735-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459030
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5B-735-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27165 lumens
Efficiency: N/A
Efficacy: 133.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

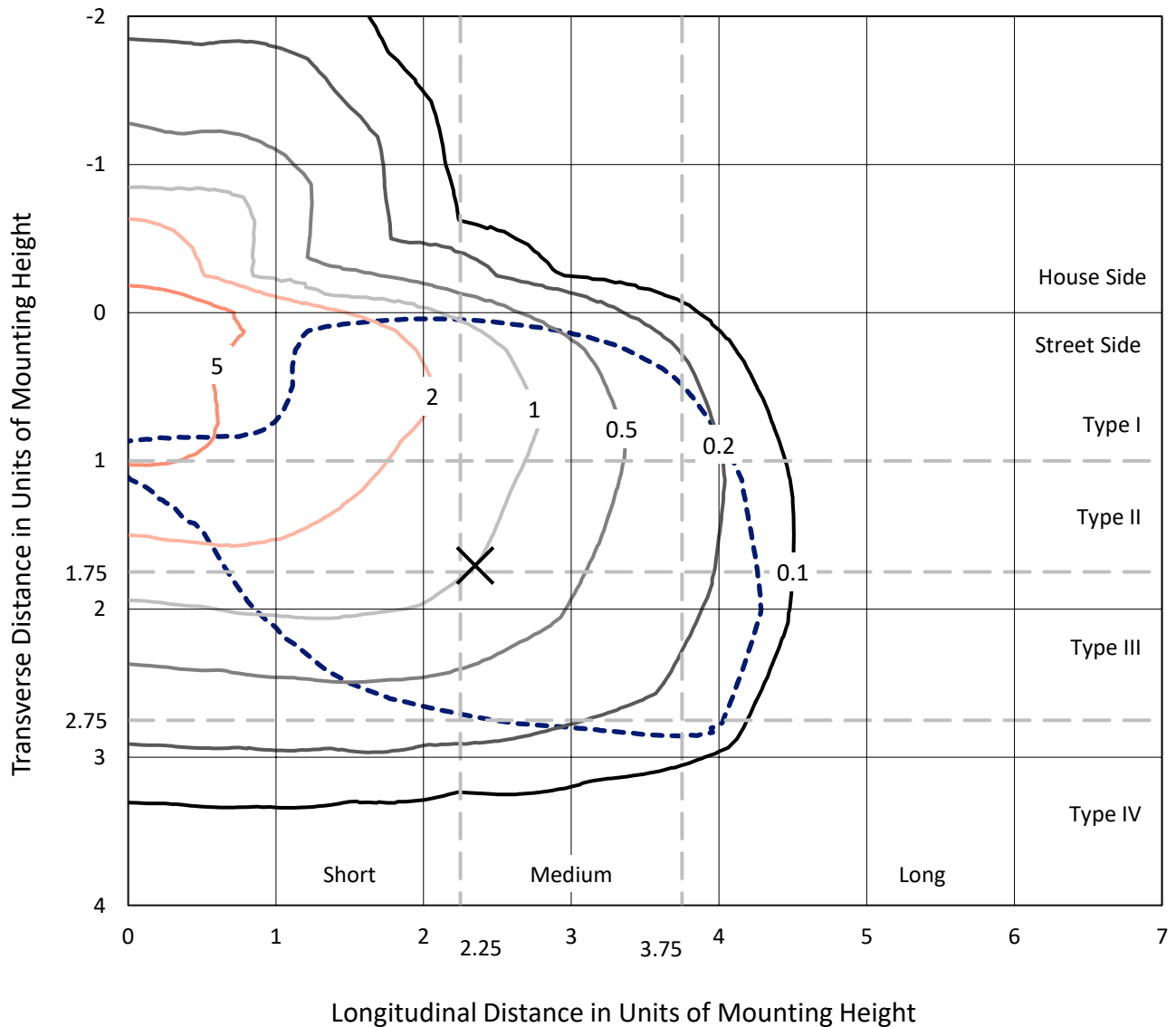
Input Watts (W): 204
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

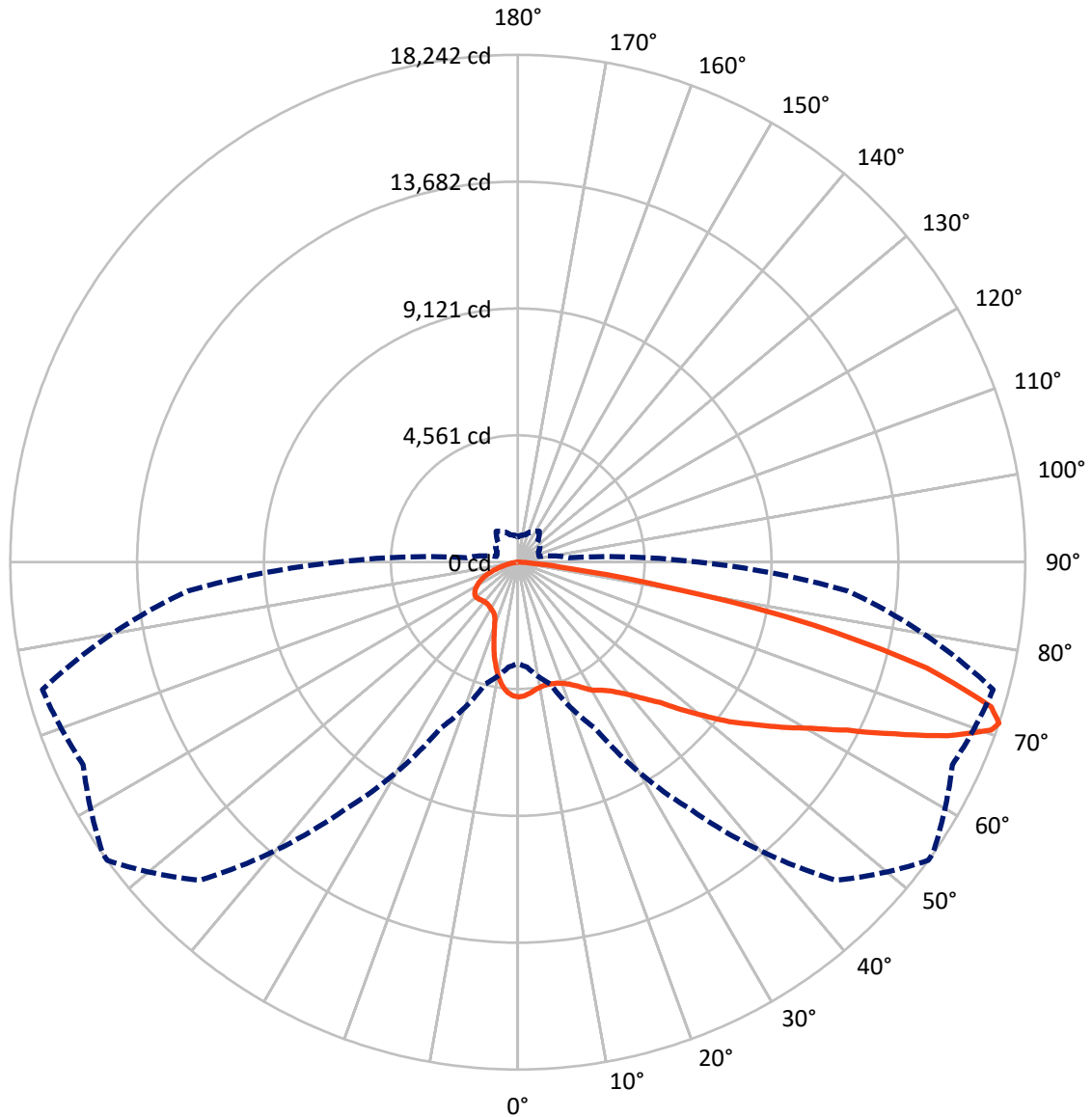
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4904.5	0.0	4904.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	22260.5	0.0	22260.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	27165.0	0.0	27165.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	431.9	1.6
10°-20°	1140.5	4.2
20°-30°	1898.9	7.0
30°-40°	2807.9	10.3
40°-50°	3955.0	14.6
50°-60°	5295.9	19.5
60°-70°	6675.0	24.6
70°-80°	4559.0	16.8
80°-90°	400.9	1.5
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°	27165.0	100.0
0°-180°	27165.0	100.0



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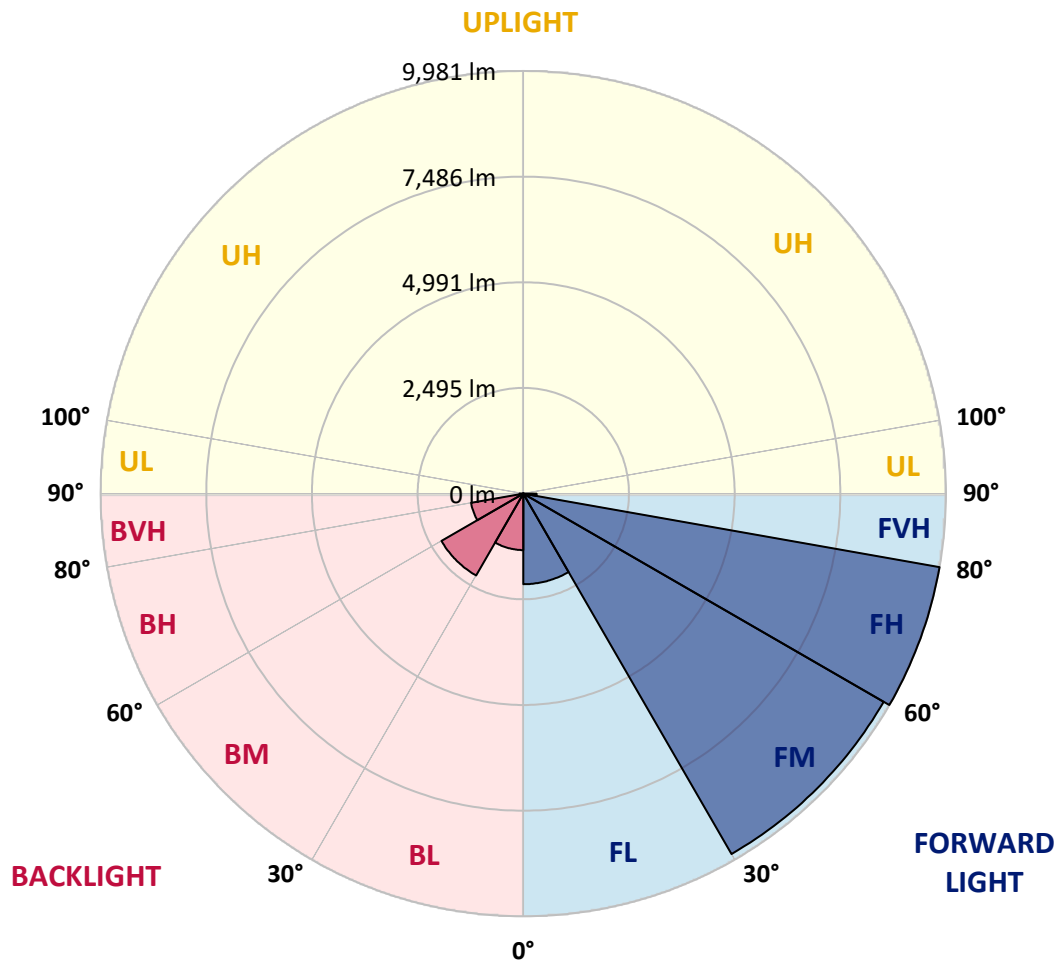
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2138.3	7.9			
FM	(30°-60°)	9827.3	36.2			
FH	(60°-80°)	9981.5	36.7			G4/12000
FVH	(80°-90°)	313.4	1.2			G3/500
BL	(0°-30°)	1332.9	4.9	B3/2500		
BM	(30°-60°)	2231.4	8.2	B2/2500		
BH	(60°-80°)	1252.6	4.6	B3/2500		G3/2500
BVH	(80°-90°)	87.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6
2.5°	4682.3	4704.3	4710.2	4724.8	4755.7	4780.6	4805.6	4802.6	4837.8	4852.5	4865.7
5°	4473.9	4479.8	4501.8	4531.2	4585.5	4654.4	4721.9	4723.4	4810.0	4878.9	4912.7
7.5°	4321.3	4340.4	4355.1	4385.9	4443.1	4518.0	4625.1	4633.9	4787.9	4924.4	4996.3
10°	4221.5	4243.6	4259.7	4297.9	4355.1	4438.7	4554.6	4570.8	4771.8	4996.3	5122.5
12.5°	4130.6	4152.6	4167.3	4217.1	4292.0	4394.7	4525.3	4544.4	4777.7	5079.9	5260.4
15°	4186.3	4203.9	4198.1	4212.7	4262.6	4380.0	4537.0	4556.1	4799.7	5160.6	5396.9
17.5°	4434.3	4449.0	4400.6	4344.8	4321.3	4407.9	4573.7	4594.3	4843.7	5244.3	5536.3
20°	4799.7	4839.3	4733.7	4608.9	4495.9	4507.7	4650.0	4672.0	4905.3	5327.9	5678.6
22.5°	5275.1	5304.4	5175.3	4969.9	4761.5	4654.4	4764.5	4777.7	4997.8	5436.5	5834.2
25°	5834.2	5851.8	5672.8	5408.6	5107.8	4905.3	4921.5	4945.0	5150.4	5559.8	5972.1
27.5°	6377.1	6432.8	6225.9	5903.1	5506.9	5169.5	5137.2	5151.8	5316.2	5628.7	6067.5
30°	7021.2	7016.8	6798.2	6424.0	5916.3	5457.1	5341.1	5338.2	5405.7	5662.5	6136.4
32.5°	7534.8	7595.0	7380.7	6972.8	6384.4	5754.9	5482.0	5476.1	5474.7	5721.2	6239.1
35°	8118.8	8127.6	7931.0	7520.1	6890.6	6129.1	5678.6	5649.3	5615.5	5847.4	6378.5
37.5°	8641.2	8682.3	8501.8	8041.0	7388.1	6517.9	5948.6	5929.5	5826.8	6066.0	6601.6
40°	9049.1	9079.9	8971.3	8532.6	7878.2	6937.6	6292.0	6256.8	6132.0	6424.0	6899.5
42.5°	9182.6	9245.7	9288.3	9072.6	8441.6	7435.0	6714.6	6670.5	6575.2	6967.0	7242.8
45°	9192.9	9292.7	9517.2	9527.5	9008.0	8030.8	7207.6	7176.8	7169.4	7662.5	7725.6
47.5°	9115.1	9216.4	9593.5	9797.5	9512.8	8632.4	7919.3	7870.8	7875.2	8522.3	8267.0
50°	8927.3	9047.6	9505.5	9970.6	9907.5	9257.5	8670.5	8654.4	8745.4	9504.0	8829.0
52.5°	8573.7	8719.0	9414.5	10079.2	10201.0	9796.0	9524.5	9479.0	9709.4	10569.3	9443.8
55°	7595.0	7813.6	9081.4	10139.3	10479.8	10311.0	10293.4	10375.6	10680.8	11731.4	10120.3
57.5°	7084.3	7248.7	8358.0	10149.6	10831.9	10909.7	11191.4	11212.0	11746.1	12965.5	10884.8
60°	6805.5	6950.8	7961.8	10082.1	11323.5	11650.7	12110.0	12183.4	12786.4	14302.2	11677.1
62.5°	6562.0	6686.7	7724.1	9848.8	11878.2	12749.8	13300.0	13335.2	13967.7	15778.4	12459.2
65°	5988.2	6130.6	7245.7	9615.5	12356.5	14123.2	14878.9	14837.8	15225.2	17052.0	12949.3
67.5°	5214.9	5395.4	6352.1	8809.9	12592.7	15624.3	16657.3	16605.9	16466.5	17886.9	13090.2
70°	4227.4	4324.3	5209.1	7417.4	11649.2	16412.2	18061.5	18007.2	17235.4	17997.0	12424.0
71°	3637.5	3788.7	4535.6	6588.4	10864.2	16171.6	18242.0	18227.4	17236.9	17693.2	11922.2
72.5°	2839.3	2931.8	3592.1	5104.9	9234.0	14804.0	17796.0	17851.7	16862.7	16849.5	10887.7
75°	1796.0	1837.1	2253.8	3005.1	5066.7	10484.2	15191.4	15342.6	14972.8	13791.6	8096.8
77.5°	1043.3	1096.1	1350.0	1771.1	2189.3	5690.4	10870.1	11034.4	10403.5	7593.5	3314.7
80°	607.5	666.2	889.2	1028.6	1005.1	2111.5	5534.8	5815.1	4504.7	1917.8	930.3
82.5°	337.5	377.1	625.1	626.6	535.6	689.7	1741.7	1822.4	1285.4	773.3	380.0
85°	245.0	277.3	403.5	365.4	256.8	296.4	606.0	635.4	519.4	325.8	123.3
87.5°	86.6	123.3	221.6	176.1	70.4	61.6	174.6	142.3	132.1	91.0	27.9
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°	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6	4846.6
2.5°	4873.1	4876.0	4861.3	4834.9	4808.5	4774.7	4736.6	4707.2	4694.0	4692.6	4691.1
5°	4925.9	4933.2	4877.5	4795.3	4704.3	4592.8	4497.4	4388.8	4360.9	4316.9	4330.1
7.5°	5011.0	5006.6	4896.5	4721.9	4509.1	4272.9	4073.3	3957.4	3837.1	3803.4	3804.8
10°	5132.8	5104.9	4896.5	4572.2	4217.1	3866.5	3587.7	3411.6	3316.2	3237.0	3207.6
12.5°	5261.9	5191.5	4849.6	4362.4	3841.5	3411.6	3112.2	2874.5	2812.9	2748.3	2749.8
15°	5385.2	5267.8	4757.1	4067.5	3436.5	2925.9	2635.4	2493.0	2473.9	2481.3	2479.8
17.5°	5496.7	5322.1	4616.3	3738.8	2964.0	2509.2	2355.1	2365.4	2416.7	2453.4	2457.8
20°	5609.7	5354.3	4406.4	3298.6	2518.0	2256.8	2262.6	2343.3	2421.1	2471.0	2478.3
22.5°	5716.8	5369.0	4159.9	2873.1	2195.1	2149.7	2236.2	2322.8	2399.1	2447.5	2454.9
25°	5787.2	5335.3	3810.7	2428.5	2036.7	2111.5	2202.5	2275.9	2340.4	2390.3	2402.0
27.5°	5806.3	5226.7	3377.8	2069.0	1963.3	2074.8	2158.5	2212.8	2262.6	2309.6	2318.4
30°	5796.0	5066.7	2902.4	1857.7	1920.8	2032.3	2096.8	2136.5	2196.6	2233.3	2240.6
32.5°	5779.9	4880.4	2406.4	1744.7	1885.5	1992.7	2030.8	2066.0	2064.6	2049.9	2060.2
35°	5785.7	4657.4	2004.4	1677.2	1854.7	1963.3	1995.6	1951.6	1825.4	1819.5	1813.6
37.5°	5816.6	4437.2	1712.4	1630.2	1838.6	1958.9	1976.5	1774.0	1662.5	1611.1	1597.9
40°	5895.8	4180.5	1520.2	1595.0	1837.1	1992.7	1889.9	1684.5	1470.3	1370.5	1363.2
42.5°	6001.4	3928.1	1402.8	1573.0	1854.7	2044.0	1854.7	1558.3	1325.0	1266.3	1257.5
45°	6158.4	3639.0	1338.2	1562.7	1881.1	2063.1	1843.0	1465.9	1266.3	1219.4	1219.4
47.5°	6336.0	3363.2	1303.0	1555.4	1914.9	2049.9	1738.8	1436.5	1238.4	1244.3	1272.2
50°	6512.1	3124.0	1276.6	1539.2	1944.2	2042.5	1696.3	1435.1	1245.8	1320.6	1370.5
52.5°	6716.0	2955.2	1244.3	1512.8	1944.2	1995.6	1683.0	1464.4	1266.3	1288.3	1310.3
55°	6962.5	2902.4	1203.2	1455.6	1909.0	1878.2	1675.7	1507.0	1281.0	1229.6	1238.4
57.5°	7288.3	2987.5	1163.6	1383.7	1828.3	1756.4	1672.8	1518.7	1247.2	1204.7	1195.9
60°	7666.9	3156.3	1151.9	1310.3	1718.3	1652.2	1655.2	1485.0	1200.3	1156.3	1163.6
62.5°	7932.5	3257.5	1144.5	1254.6	1597.9	1537.8	1612.6	1443.9	1179.7	1141.6	1148.9
65°	7932.5	3134.2	1077.0	1169.5	1442.4	1399.8	1561.3	1392.5	1153.3	1109.3	1102.0
67.5°	7631.7	2774.7	974.3	1041.8	1270.7	1242.8	1489.4	1330.9	1113.7	1080.0	1062.4
70°	6848.1	2104.2	845.2	892.1	1053.6	1078.5	1396.9	1247.2	1047.7	1006.6	980.2
71°	6503.3	1832.7	790.9	815.8	969.9	1006.6	1352.9	1212.0	1018.3	959.6	912.7
72.5°	5838.6	1543.6	708.7	719.0	829.0	895.1	1260.4	1144.5	962.6	878.9	826.1
75°	4435.8	1126.9	570.8	564.9	613.3	710.2	1066.8	1019.8	843.7	730.7	699.9
77.5°	1916.4	613.3	427.0	431.4	416.7	538.5	839.3	876.0	723.4	594.3	566.4
80°	581.1	353.6	292.0	297.9	278.8	361.0	591.3	686.7	581.1	462.2	424.1
82.5°	297.9	211.3	199.6	196.6	177.5	204.0	358.0	469.6	415.3	289.1	255.3
85°	129.1	113.0	98.3	95.4	83.6	73.4	127.7	234.8	220.1	161.4	154.1
87.5°	32.3	29.3	19.1	17.6	10.3	1.5	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)