

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: P453708

Luminaire Tested: **GALN-SA4D-730-U-SL3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453708  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4D-730-U-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27624 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

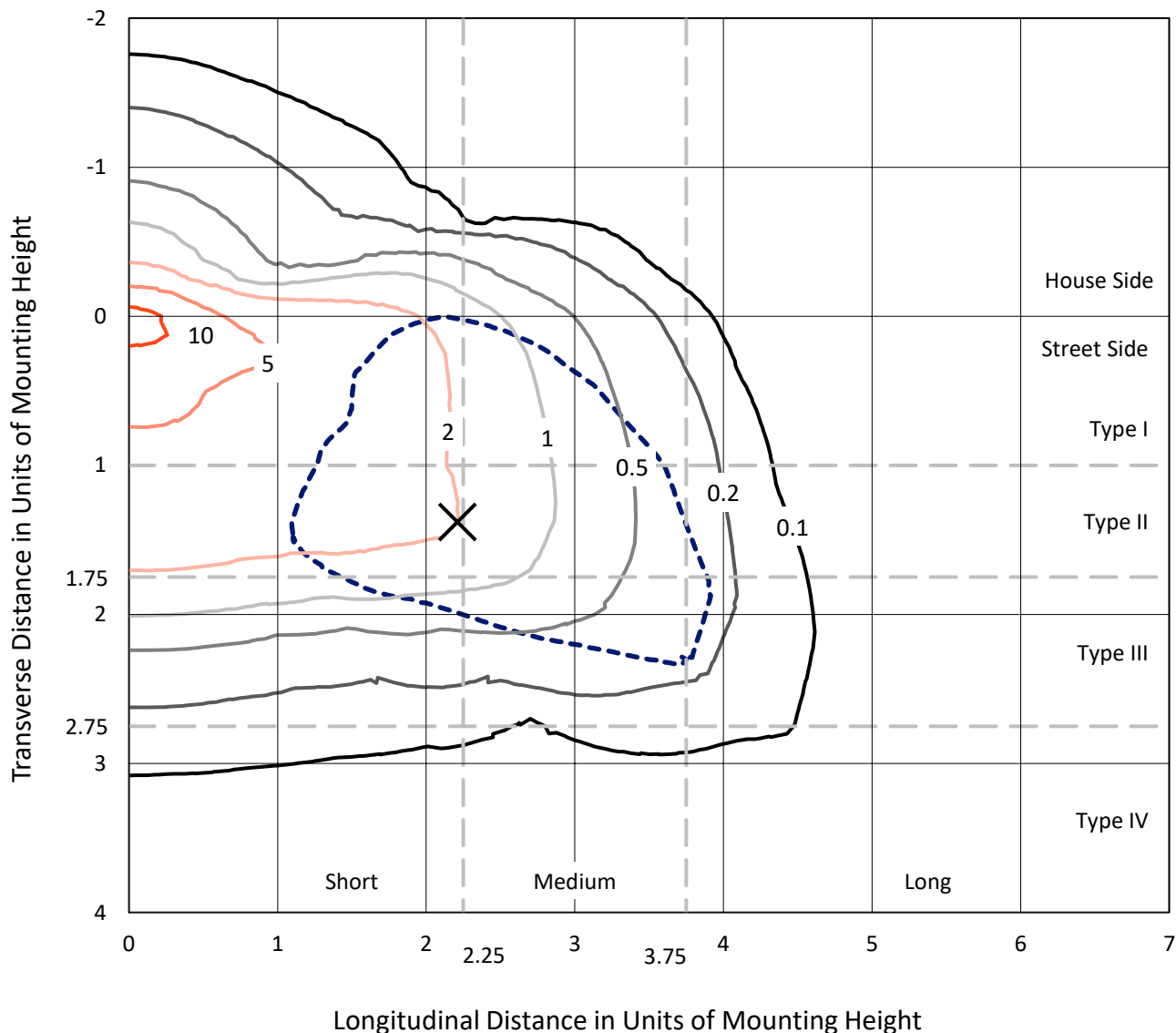
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

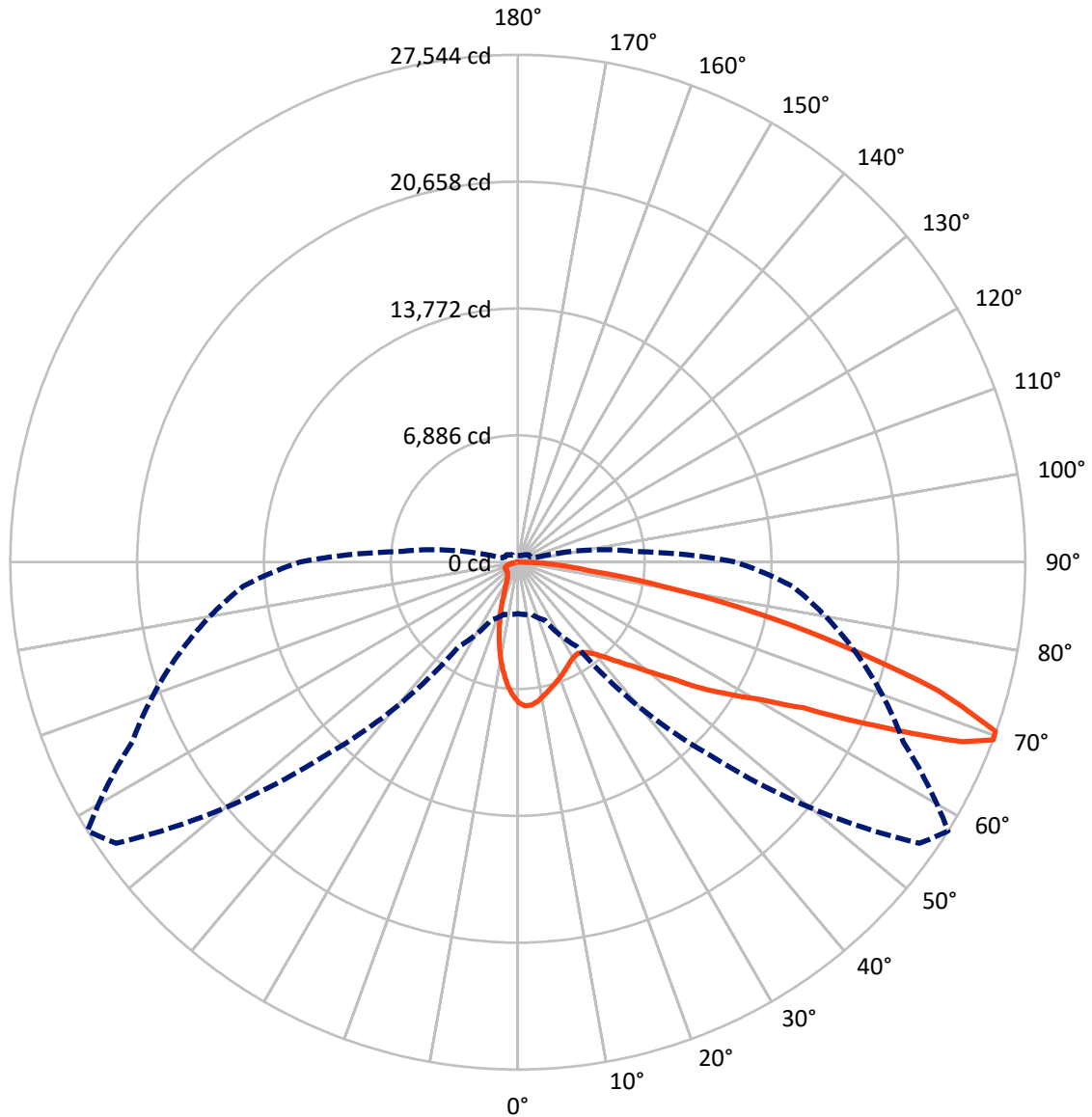
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4048.3	0.0	4048.3
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	23575.7	0.0	23575.7
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	27624.0	0.0	27624.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	648.3	2.3
10°-20°	1423.5	5.2
20°-30°	1839.2	6.7
30°-40°	2388.8	8.6
40°-50°	3472.9	12.6
50°-60°	5541.7	20.1
60°-70°	7403.0	26.8
70°-80°	4267.5	15.4
80°-90°	639.2	2.3
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°	27624.0	100.0
0°-180°	27624.0	100.0

**Coefficient of Utilization**



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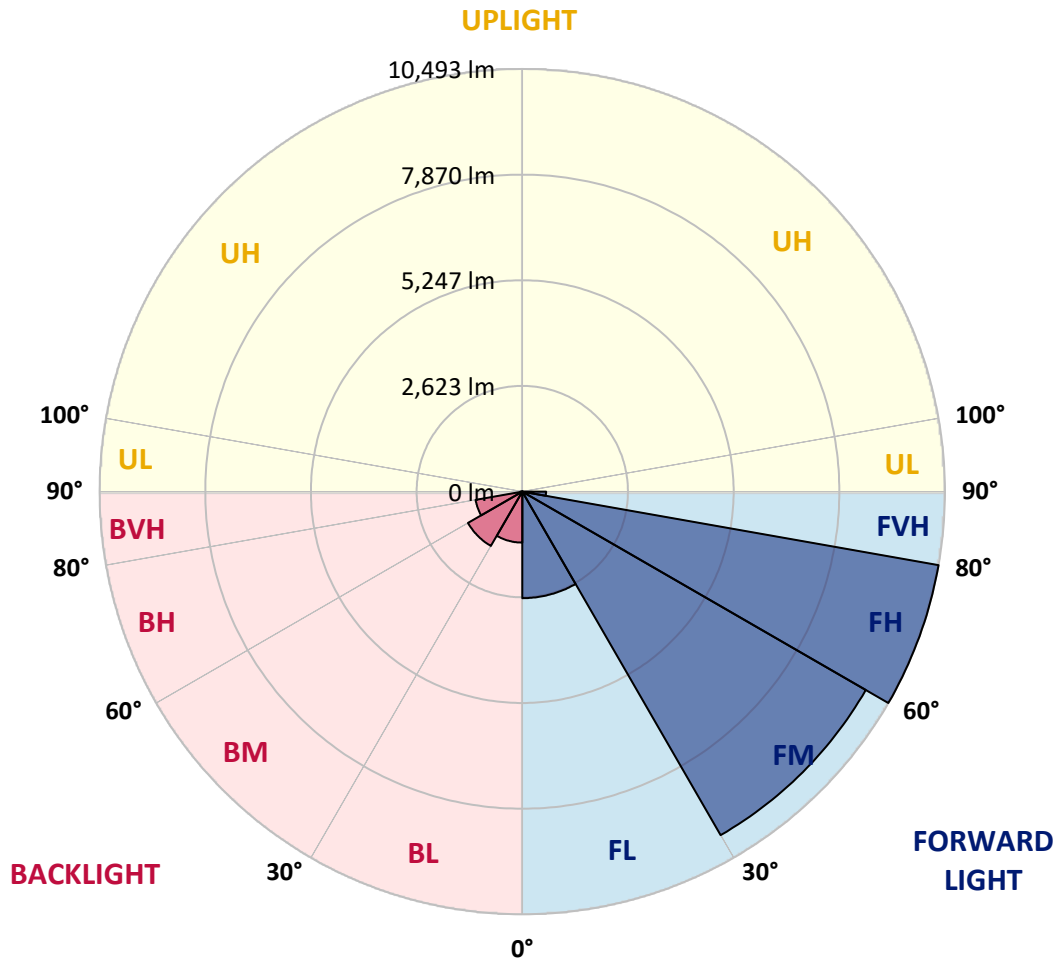
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2645.7	9.6			
FM	(30°-60°)	9846.5	35.6			
FH	(60°-80°)	10493.3	38.0			G4/12000
FVH	(80°-90°)	590.2	2.1			G4/750
BL	(0°-30°)	1265.3	4.6	B3/2500		
BM	(30°-60°)	1556.8	5.6	B2/2500		
BH	(60°-80°)	1177.2	4.3	B3/2500		G3/2500
BVH	(80°-90°)	49.0	0.2			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7
2.5°	7917.1	7938.7	7932.5	7924.8	7912.5	7878.6	7823.1	7813.9	7778.5	7703.0	7609.0
5°	7795.4	7813.9	7815.4	7826.2	7841.6	7835.5	7795.4	7790.8	7738.4	7636.7	7479.6
7.5°	7377.9	7402.6	7456.5	7516.6	7570.5	7621.3	7633.7	7641.4	7609.0	7491.9	7282.4
10°	6908.0	6932.7	6957.3	7046.7	7179.2	7305.5	7410.3	7424.1	7431.8	7324.0	7068.3
12.5°	6387.3	6438.2	6490.5	6623.0	6800.2	6998.9	7183.8	7213.1	7265.5	7183.8	6883.4
15°	5945.2	5997.5	6073.0	6191.7	6405.8	6692.4	6952.7	7000.5	7103.7	7062.1	6710.8
17.5°	5638.6	5657.1	5709.5	5845.0	6076.1	6378.1	6726.2	6821.8	6986.6	6975.8	6562.9
20°	5396.7	5419.8	5452.2	5535.4	5775.7	6094.6	6515.2	6638.4	6861.8	6898.8	6416.6
22.5°	5295.0	5312.0	5307.4	5352.0	5515.3	5835.8	6301.0	6447.4	6750.9	6846.4	6281.0
25°	5301.2	5316.6	5293.5	5282.7	5379.8	5607.8	6077.7	6264.1	6661.5	6811.0	6157.8
27.5°	5404.4	5415.2	5372.1	5328.9	5336.6	5466.0	5892.8	6099.2	6586.1	6826.4	6054.5
30°	5543.1	5563.1	5535.4	5483.0	5426.0	5432.1	5774.2	5977.5	6550.6	6880.3	6005.2
32.5°	5721.8	5740.3	5727.9	5686.3	5612.4	5530.7	5744.9	5932.8	6553.7	6989.7	5994.5
35°	5909.7	5946.7	5966.7	5963.6	5903.6	5761.8	5860.4	6016.0	6627.6	7173.0	6057.6
37.5°	6122.3	6153.1	6239.4	6294.9	6239.4	6074.6	6120.8	6228.6	6790.9	7438.0	6196.3
40°	6328.8	6375.0	6501.3	6673.9	6652.3	6507.5	6518.3	6589.1	7079.0	7832.4	6467.4
42.5°	6544.5	6599.9	6820.2	7076.0	7126.8	7014.3	7043.6	7106.8	7488.8	8379.3	6932.7
45°	6821.8	6888.0	7159.2	7478.1	7678.3	7609.0	7692.2	7723.0	8037.3	9091.1	7545.8
47.5°	7179.2	7256.2	7590.5	7988.0	8271.5	8334.6	8479.4	8461.0	8716.7	9933.8	8340.8
50°	7781.6	7824.7	8140.5	8545.7	8935.5	9220.5	9377.6	9406.9	9559.4	10753.4	9229.7
52.5°	8497.9	8536.4	8764.5	9118.8	9607.2	10211.1	10599.3	10503.8	10540.8	11751.7	10269.6
55°	9303.7	9368.4	9513.2	9748.9	10382.1	11271.0	12050.5	12073.7	11663.9	12706.8	11266.4
57.5°	9927.6	10037.0	10285.0	10620.9	11423.5	12449.6	13497.2	13512.6	12988.8	13726.7	12366.4
60°	9613.3	9742.7	10309.7	11127.7	12790.0	14506.3	15225.7	15137.9	14278.2	14888.3	13708.2
62.5°	8257.6	8280.7	9104.9	10383.6	13210.6	17257.8	17798.5	17427.2	15999.1	16361.1	15071.7
65°	5344.3	5495.3	6148.5	7940.2	11828.7	18784.5	22306.3	21448.2	18411.7	18032.7	16213.2
67.5°	3373.9	3335.4	3606.5	4534.0	8135.9	17439.6	26153.2	26017.6	21566.8	19088.0	15940.6
69°	2797.7	2840.9	2933.3	3475.6	5598.5	14889.9	26607.6	27544.3	23096.6	19004.8	14949.9
70°	2537.4	2557.4	2654.4	3081.2	4319.8	12471.1	25862.0	27502.7	23697.5	18656.6	14232.0
72.5°	2013.6	2012.0	2178.4	2563.6	3229.1	7119.1	21235.6	23877.7	23025.8	17035.9	11759.4
75°	1529.8	1554.5	1737.8	2169.2	2974.9	3890.0	14819.0	18388.6	18390.1	13455.6	7337.9
77.5°	1103.1	1118.5	1332.6	1821.0	2802.3	3153.6	9870.6	13189.0	12398.7	6165.5	2306.3
80°	722.5	731.8	895.1	1442.0	2526.6	2974.9	5852.7	8072.7	5848.1	1636.1	762.6
82.5°	395.9	442.2	546.9	933.6	2027.4	2748.4	3557.2	4085.7	2193.8	728.7	397.5
85°	198.7	211.1	308.1	545.4	1324.9	2273.9	2477.3	2343.2	1132.3	362.0	206.4
87.5°	58.5	73.9	127.9	211.1	537.7	1184.7	1378.8	1237.1	436.0	131.0	43.1
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°	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7	7633.7
2.5°	7570.5	7542.8	7419.5	7308.6	7206.9	7099.1	7008.2	6928.1	6935.8	6937.3	6855.7
5°	7397.9	7334.8	7100.6	6881.8	6697.0	6462.8	6262.5	6133.1	6068.4	5982.1	6012.9
7.5°	7163.8	7042.1	6717.0	6353.4	6012.9	5709.5	5379.8	5153.3	5008.5	4868.3	4886.8
10°	6921.9	6726.2	6253.3	5772.6	5332.0	4846.7	4426.1	4065.6	3797.6	3697.4	3631.2
12.5°	6673.9	6416.6	5815.8	5176.4	4567.9	3987.1	3390.9	3004.2	2708.4	2551.2	2571.3
15°	6447.4	6134.7	5359.7	4580.2	3789.9	3098.1	2503.5	2135.3	1928.8	1885.7	1910.3
17.5°	6237.9	5828.1	4933.0	4000.9	3078.1	2323.2	1881.1	1673.1	1589.9	1566.8	1565.2
20°	6022.2	5567.7	4453.9	3381.6	2398.7	1801.0	1543.7	1446.6	1431.2	1440.5	1442.0
22.5°	5803.4	5245.7	3960.9	2766.9	1910.3	1472.8	1349.6	1323.4	1335.7	1357.3	1360.3
25°	5601.6	4962.3	3486.4	2227.7	1525.2	1294.1	1234.0	1234.0	1261.7	1294.1	1295.6
27.5°	5435.2	4688.0	3013.4	1768.6	1277.2	1164.7	1144.7	1155.4	1194.0	1218.6	1220.2
30°	5298.1	4432.3	2566.6	1417.3	1123.1	1061.5	1056.8	1075.3	1103.1	1126.2	1127.7
32.5°	5194.9	4207.4	2149.1	1190.9	1016.8	982.9	981.4	995.2	1010.6	1016.8	1023.0
35°	5154.8	4021.0	1767.1	1047.6	945.9	924.4	924.4	922.8	929.0	932.1	935.1
37.5°	5187.2	3877.7	1471.3	955.2	893.5	878.1	868.9	859.7	856.6	856.6	858.1
40°	5324.3	3802.2	1251.0	895.1	856.6	833.5	816.5	805.7	794.9	798.0	801.1
42.5°	5615.5	3816.1	1101.5	855.0	824.2	791.9	767.2	754.9	747.2	756.4	754.9
45°	6079.2	3954.7	1006.0	827.3	791.9	750.3	727.2	714.8	714.8	728.7	733.3
47.5°	6727.8	4219.7	955.2	805.7	767.2	717.9	694.8	685.6	688.6	711.8	713.3
50°	7519.7	4680.3	945.9	794.9	754.9	694.8	668.6	659.4	667.1	691.7	694.8
52.5°	8393.2	5273.5	990.6	796.5	744.1	680.9	647.1	633.2	640.9	660.9	667.1
55°	9428.5	6016.0	1106.1	802.7	728.7	673.2	631.6	600.8	610.1	623.9	625.5
57.5°	10485.3	6952.7	1309.5	804.2	716.4	659.4	605.5	565.4	565.4	574.6	579.3
60°	11776.3	7972.6	1577.6	805.7	717.9	639.3	570.0	525.3	519.2	523.8	525.3
62.5°	13058.1	8826.1	1622.2	801.1	733.3	619.3	531.5	485.3	474.5	473.0	469.9
65°	13623.5	8667.4	1329.5	779.5	750.3	607.0	500.7	446.8	428.3	422.1	422.1
67.5°	12702.2	7331.7	999.8	750.3	739.5	594.7	471.4	414.4	392.9	380.5	380.5
69°	11836.4	6521.3	898.2	730.2	711.8	574.6	452.9	397.5	371.3	357.4	352.8
70°	11167.8	5963.6	855.0	713.3	685.6	551.5	439.1	385.1	355.9	340.5	337.4
72.5°	8912.4	4678.8	748.7	648.6	583.9	463.7	389.8	346.6	318.9	302.0	297.3
75°	5136.3	2535.8	620.9	563.9	469.9	360.5	329.7	302.0	280.4	265.0	260.4
77.5°	1580.7	979.8	449.9	445.2	345.1	278.8	263.4	252.7	237.3	220.3	217.2
80°	665.5	499.2	305.0	300.4	229.5	194.1	189.5	188.0	181.8	167.9	163.3
82.5°	365.1	281.9	212.6	184.9	138.7	112.5	117.1	118.6	114.0	100.1	90.9
85°	178.7	154.1	103.2	83.2	63.2	40.1	38.5	46.2	43.1	30.8	33.9
87.5°	35.4	43.1	27.7	12.3	6.2	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)