

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: P459071

Luminaire Tested: **GALN-SA5D-735-U-SL2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-735-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36023 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

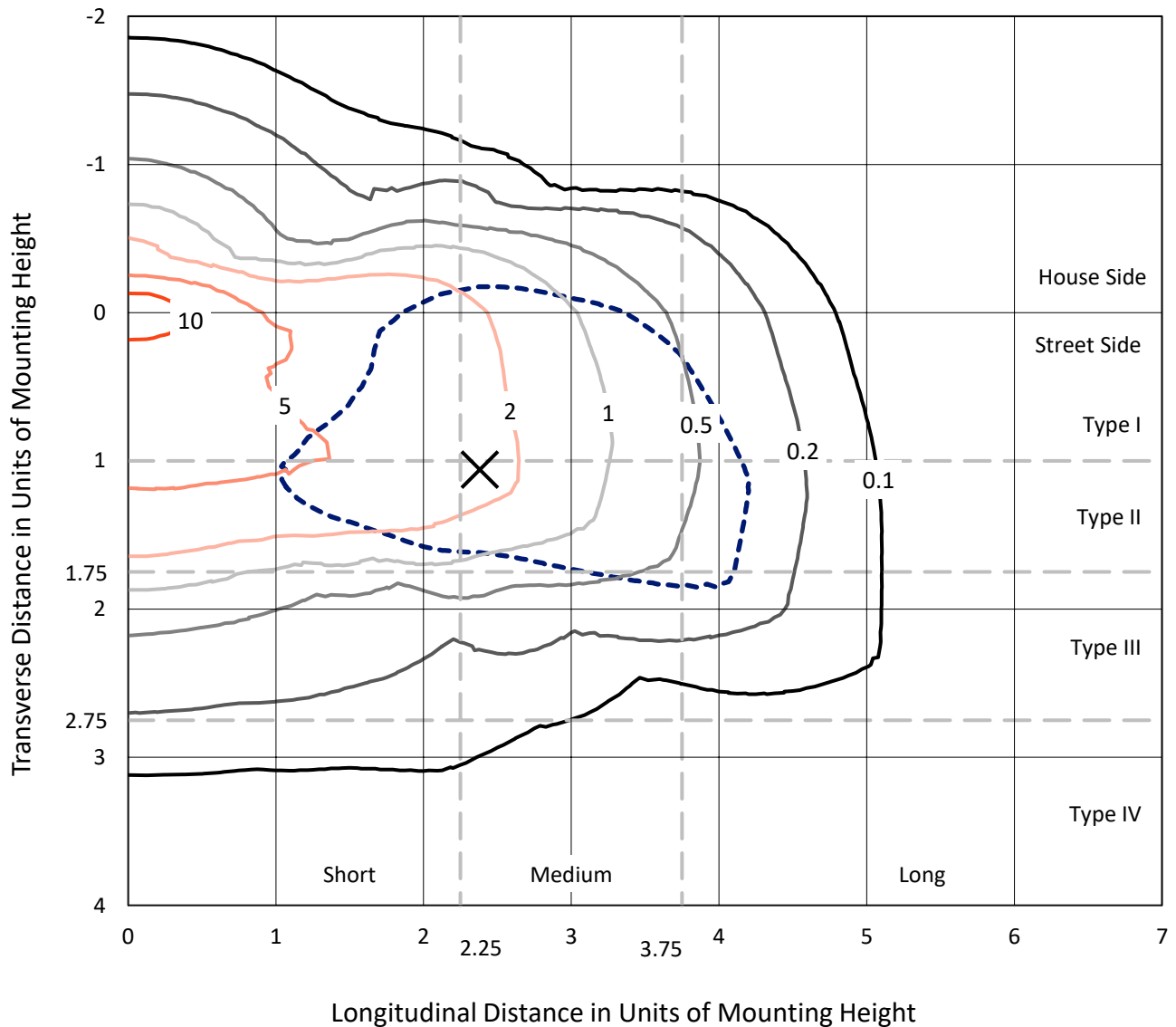
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

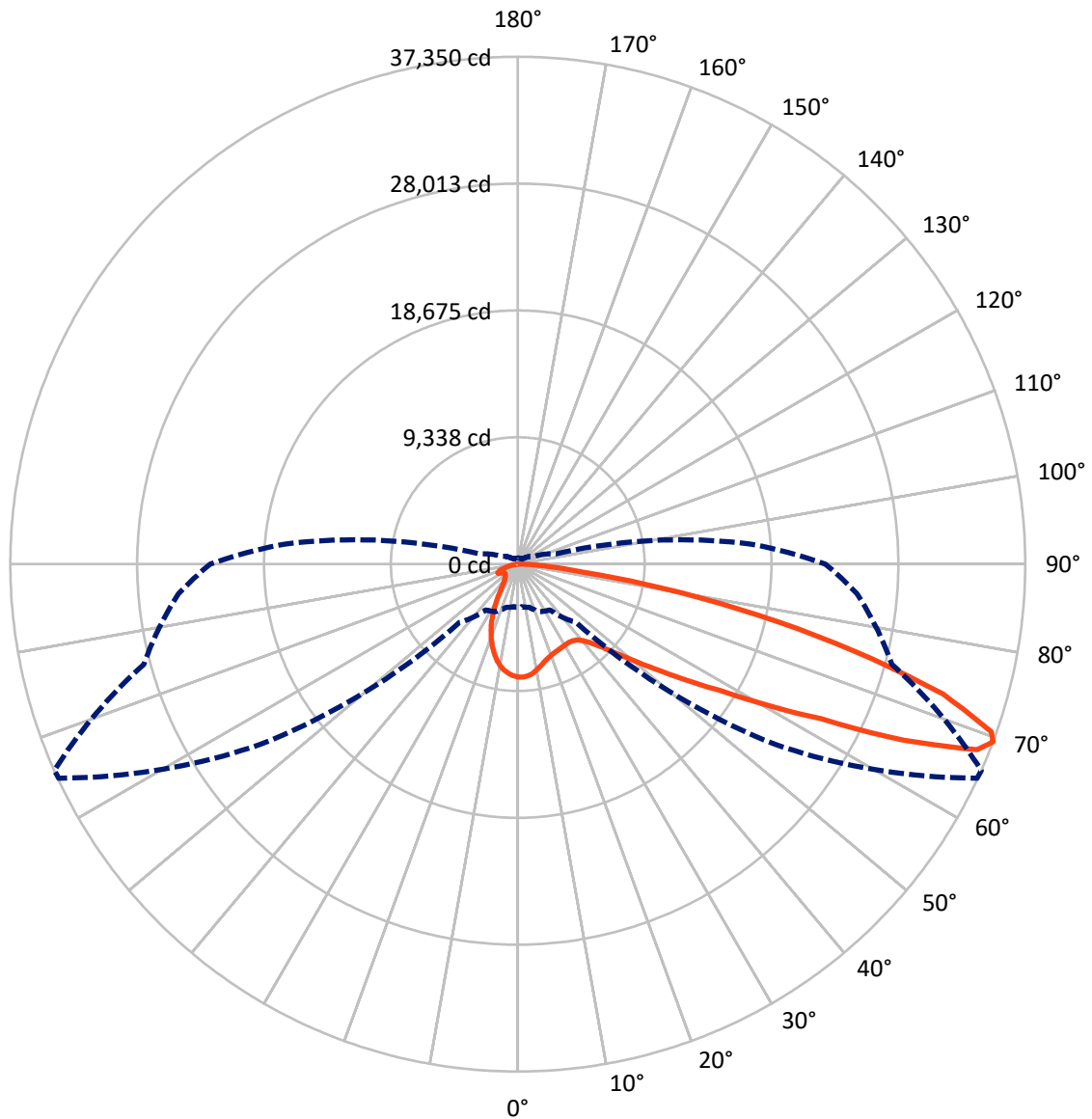
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.3 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6774.6	0.0	6774.6
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	29248.4	0.0	29248.4
	% Fixture	81.2	0.0	81.2
Total	Lumens	36023.0	0.0	36023.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	722.4	2.0
10°-20°	1713.4	4.8
20°-30°	2332.6	6.5
30°-40°	3134.6	8.7
40°-50°	4680.4	13.0
50°-60°	7445.0	20.7
60°-70°	9156.9	25.4
70°-80°	5957.9	16.5
80°-90°	879.8	2.4
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°	36023.0	100.0
0°-180°	36023.0	100.0

Coefficient of Utilization



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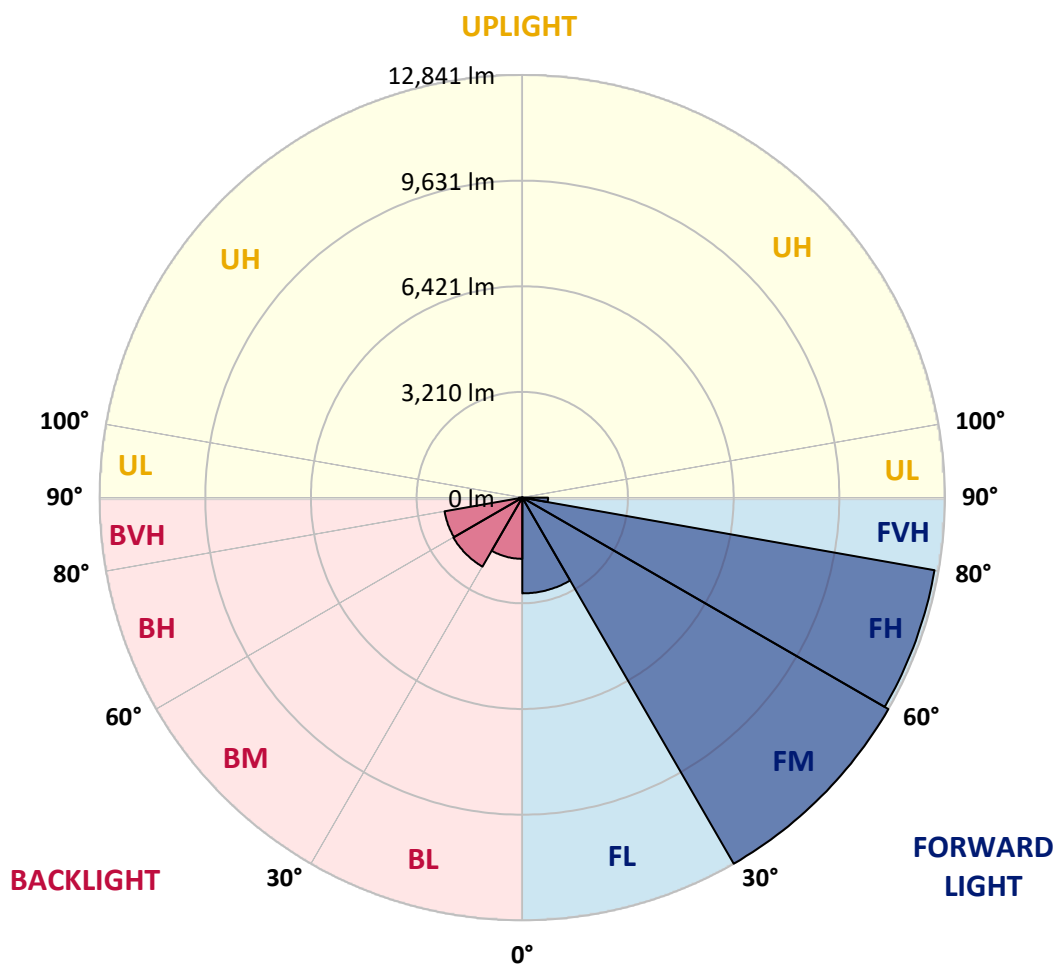
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2908.8	8.1			
FM	(30°-60°)	12841.1	35.6			
FH	(60°-80°)	12716.3	35.3			G5
FVH	(80°-90°)	782.2	2.2			G5
BL	(0°-30°)	1859.6	5.2	B3/2500		
BM	(30°-60°)	2418.8	6.7	B2/2500		
BH	(60°-80°)	2398.5	6.7	B3/2500		G3/2500
BVH	(80°-90°)	97.6	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-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7
2.5°	8027.5	8059.4	8095.3	8135.2	8211.0	8252.9	8282.8	8316.7	8320.7	8338.7	8324.7
5°	7435.0	7472.9	7526.7	7602.5	7716.3	7893.8	8077.3	8226.9	8244.9	8328.7	8352.6
7.5°	6940.2	6962.2	7006.1	7127.8	7289.3	7486.8	7754.2	8057.4	8101.3	8300.8	8370.6
10°	6537.3	6559.2	6611.1	6736.8	6896.4	7143.7	7437.0	7835.9	7871.9	8215.0	8374.6
12.5°	6236.0	6256.0	6311.8	6435.5	6619.1	6850.5	7173.6	7596.6	7648.4	8101.3	8336.7
15°	6006.6	6044.5	6090.4	6192.2	6385.7	6609.1	6922.3	7377.1	7419.0	7981.6	8310.7
17.5°	5908.9	5926.8	5958.8	6052.5	6194.1	6413.6	6728.8	7205.6	7255.4	7897.8	8304.7
20°	5912.9	5930.8	5936.8	5988.7	6090.4	6279.9	6591.1	7069.9	7129.8	7824.0	8314.7
22.5°	6048.5	6050.5	6028.6	6010.6	6050.5	6208.1	6493.4	6968.2	7038.0	7792.1	8322.7
25°	6258.0	6293.9	6262.0	6178.2	6104.4	6180.2	6455.5	6912.3	6978.1	7746.2	8312.7
27.5°	6597.1	6603.1	6577.2	6463.5	6271.9	6216.1	6439.5	6870.4	6926.3	7712.3	8262.9
30°	7052.0	7034.0	7010.1	6884.4	6583.2	6353.7	6473.4	6832.5	6890.4	7662.4	8203.0
32.5°	7512.8	7568.6	7546.7	7399.1	7008.1	6621.1	6583.2	6828.5	6876.4	7624.5	8137.2
35°	8001.5	8027.5	8131.2	8055.4	7654.4	7053.9	6788.6	6890.4	6928.3	7626.5	8091.3
37.5°	8384.5	8454.4	8697.7	8763.6	8386.5	7626.5	7121.8	7065.9	7081.9	7724.2	8109.2
40°	8847.4	8967.1	9280.3	9549.6	9302.2	8370.6	7688.3	7391.1	7411.0	7959.6	8226.9
42.5°	9433.9	9517.6	9938.6	10303.6	10263.7	9354.1	8374.6	7923.7	7933.7	8428.4	8556.1
45°	10120.1	10239.8	10712.6	11261.2	11354.9	10467.2	9366.0	8729.7	8723.7	9156.6	9170.5
47.5°	10997.9	11071.7	11540.5	12138.9	12518.0	11865.6	10569.0	9886.7	9822.9	10217.9	10104.1
50°	11805.8	11921.5	12276.6	12930.9	13874.5	13503.4	12150.9	11386.9	11237.2	11606.3	11414.8
52.5°	12144.9	12266.6	12565.8	13377.8	15037.5	15622.0	14159.8	13176.3	12926.9	13210.2	13140.4
55°	11556.4	11714.0	11993.3	12980.8	15548.2	18065.8	16868.8	15245.0	15063.5	14941.8	14961.7
57.5°	9974.5	10124.1	10501.1	11590.3	14937.8	19839.2	20736.9	17904.2	17515.2	16954.6	17050.4
60°	7592.6	7686.3	7881.8	9088.7	13128.4	20300.1	25129.7	21265.6	21018.2	18959.5	19027.3
62.5°	5392.2	5497.9	5633.6	6236.0	9611.4	19001.4	28568.9	25959.6	25075.8	21036.2	20970.3
65°	4378.8	4307.0	4470.6	4751.8	5639.6	14726.3	29342.9	32474.9	31258.0	23771.2	22857.5
67.5°	3600.8	3525.0	3686.6	4187.3	4289.0	8548.1	26554.0	36704.1	36460.7	26745.6	24774.6
69°	3187.8	3147.9	3289.6	3860.1	4117.5	6070.5	23132.8	37292.6	37350.4	28499.1	25069.8
70°	2872.6	2888.6	3026.3	3694.5	4039.7	5005.2	19771.4	36480.6	36971.4	29374.8	24750.7
72.5°	2114.6	2148.5	2340.0	3060.2	3965.9	4247.1	11765.9	31864.5	32732.2	29426.7	22642.1
75°	1478.2	1462.3	1631.8	2304.1	3746.4	4209.2	6910.3	24642.9	25626.4	25434.9	19025.3
77.5°	967.5	993.5	1129.1	1627.8	3151.9	4177.3	4504.5	17483.3	18121.6	17010.5	11253.2
80°	682.3	680.3	756.1	1111.2	2338.0	4013.7	3688.6	11019.8	10858.2	6684.9	3337.5
82.5°	391.0	418.9	506.7	782.0	1564.0	3533.0	3393.3	5270.5	4811.7	1905.1	1127.1
85°	217.4	227.4	301.2	472.8	913.7	2661.2	2962.4	2397.9	2262.2	796.0	484.8
87.5°	69.8	75.8	125.7	239.4	414.9	1256.8	1677.7	1107.2	1021.4	287.3	195.5
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°	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7	8318.7
2.5°	8330.7	8354.6	8290.8	8228.9	8173.1	8095.3	8025.5	7967.6	7927.7	7921.7	7901.8
5°	8358.6	8360.6	8238.9	8075.3	7915.7	7740.2	7558.7	7429.0	7307.3	7239.5	7205.6
7.5°	8378.6	8360.6	8141.2	7875.8	7568.6	7249.4	6930.3	6674.9	6477.4	6399.6	6429.5
10°	8370.6	8314.7	7993.5	7568.6	7121.8	6645.0	6186.2	5827.1	5497.9	5328.4	5332.4
12.5°	8326.7	8234.9	7774.1	7223.5	6567.2	5928.8	5226.6	4741.9	4360.8	4135.4	4065.6
15°	8288.8	8129.2	7516.8	6754.7	5938.8	5027.1	4171.3	3572.9	3253.7	3076.1	3074.1
17.5°	8248.9	8027.5	7235.5	6258.0	5216.7	4043.7	3145.9	2689.1	2539.5	2557.5	2527.5
20°	8207.0	7907.8	6942.2	5705.4	4336.9	3016.3	2356.0	2170.4	2212.3	2294.1	2306.1
22.5°	8159.1	7780.1	6627.0	5097.0	3411.3	2270.2	1911.1	1883.2	1990.9	2118.6	2136.5
25°	8085.3	7620.5	6230.1	4460.6	2631.3	1829.3	1673.7	1693.7	1799.4	1907.1	1919.1
27.5°	7981.6	7423.0	5829.1	3666.6	1976.9	1570.0	1530.1	1556.0	1607.9	1673.7	1689.7
30°	7841.9	7199.6	5368.3	2980.4	1583.9	1440.3	1424.4	1438.3	1468.2	1496.2	1504.2
32.5°	7702.3	6984.1	4903.5	2282.2	1412.4	1354.5	1338.6	1338.6	1338.6	1342.6	1344.6
35°	7572.6	6780.6	4404.7	1777.5	1322.6	1286.7	1264.8	1240.8	1236.8	1222.9	1222.9
37.5°	7500.8	6595.1	3874.1	1488.2	1256.8	1230.9	1200.9	1161.0	1139.1	1141.1	1137.1
40°	7514.8	6473.4	3391.3	1324.6	1202.9	1175.0	1129.1	1083.2	1069.3	1069.3	1065.3
42.5°	7672.4	6433.5	2928.5	1238.8	1151.1	1119.1	1061.3	1019.4	1011.4	1009.4	1013.4
45°	8035.4	6531.3	2513.6	1183.0	1107.2	1059.3	1001.4	963.5	955.6	955.6	953.6
47.5°	8743.6	6848.5	2216.3	1147.1	1075.2	1013.4	953.6	915.7	901.7	897.7	897.7
50°	9844.8	7536.7	1994.9	1115.1	1035.4	971.5	909.7	865.8	843.8	841.8	839.9
52.5°	11374.9	8610.0	1909.1	1091.2	991.5	927.6	859.8	817.9	790.0	784.0	780.0
55°	13164.3	10108.1	2026.8	1073.3	945.6	877.8	807.9	764.0	738.1	726.1	724.1
57.5°	15237.0	11907.5	2473.7	1049.3	903.7	823.9	756.1	712.2	684.2	670.3	666.3
60°	17098.2	13756.8	3253.7	1035.4	867.8	766.0	696.2	656.3	630.4	616.4	614.4
62.5°	19143.0	15520.3	4185.3	1073.3	851.8	710.2	640.4	604.5	582.5	568.5	568.5
65°	21327.4	17285.8	4801.7	1200.9	875.8	666.3	580.5	550.6	530.6	520.7	518.7
67.5°	22799.7	17896.2	3955.9	1332.6	935.6	618.4	522.7	498.7	486.8	476.8	476.8
69°	22640.1	17124.2	2918.5	1366.5	953.6	594.5	490.7	472.8	456.8	452.8	448.9
70°	22135.4	16244.4	2445.7	1344.6	939.6	572.5	470.8	448.9	434.9	430.9	428.9
72.5°	19715.5	14087.9	1821.3	1169.0	800.0	496.7	416.9	397.0	385.0	379.0	379.0
75°	16380.1	11514.5	1422.4	929.6	626.4	418.9	357.1	341.1	331.2	327.2	325.2
77.5°	9180.5	6429.5	1021.4	728.1	474.8	339.1	299.2	285.3	275.3	271.3	271.3
80°	2557.5	1837.3	600.5	480.8	323.2	257.3	237.4	227.4	213.5	203.5	209.5
82.5°	963.5	796.0	343.1	289.3	205.5	171.6	165.6	157.6	151.6	137.6	137.6
85°	468.8	387.0	219.4	153.6	113.7	89.8	85.8	81.8	77.8	67.8	69.8
87.5°	161.6	171.6	95.8	55.9	33.9	21.9	18.0	10.0	10.0	10.0	10.0
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)