

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: P454663

Luminaire Tested: **GALN-SA5D-740-U-SL2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454663
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-740-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 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: 38670 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G5

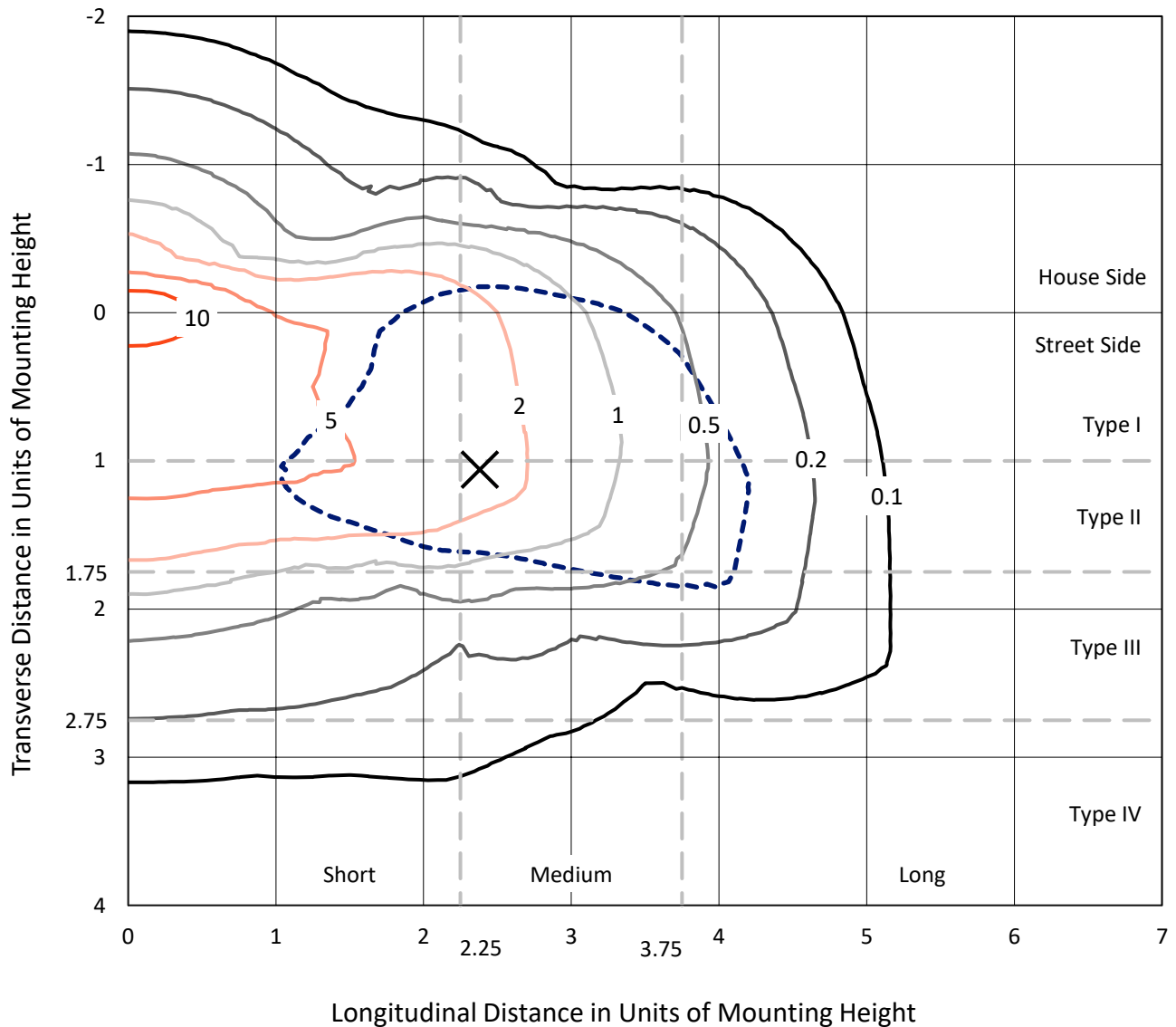
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

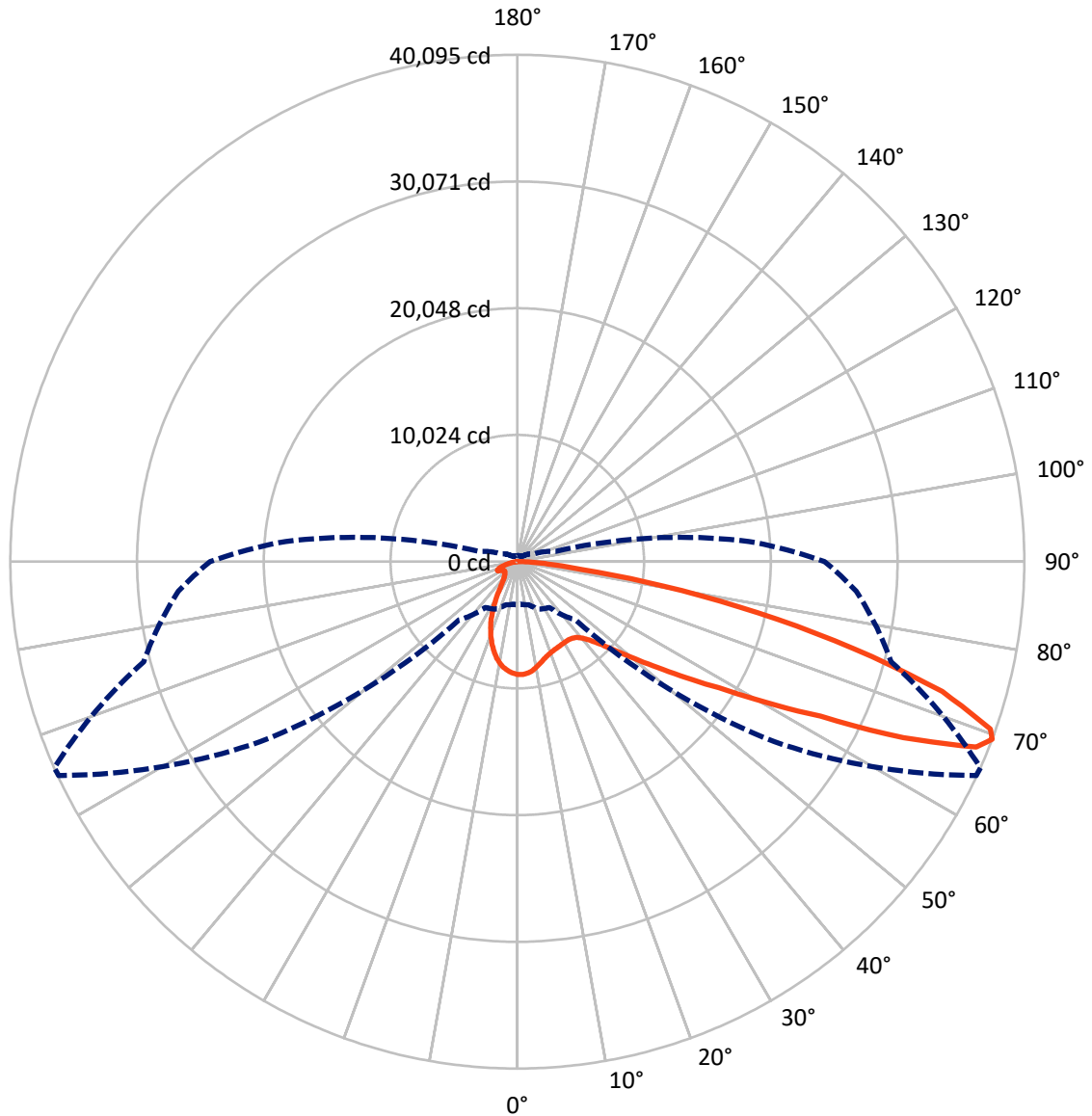
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.3 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	7272.4	0.0	7272.4
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	31397.6	0.0	31397.6
	% Fixture	81.2	0.0	81.2
Total	Lumens	38670.0	0.0	38670.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	775.5	2.0
10°-20°	1839.3	4.8
20°-30°	2504.0	6.5
30°-40°	3364.9	8.7
40°-50°	5024.3	13.0
50°-60°	7992.0	20.7
60°-70°	9829.8	25.4
70°-80°	6395.7	16.5
80°-90°	944.5	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°	38670.0	100.0
0°-180°	38670.0	100.0



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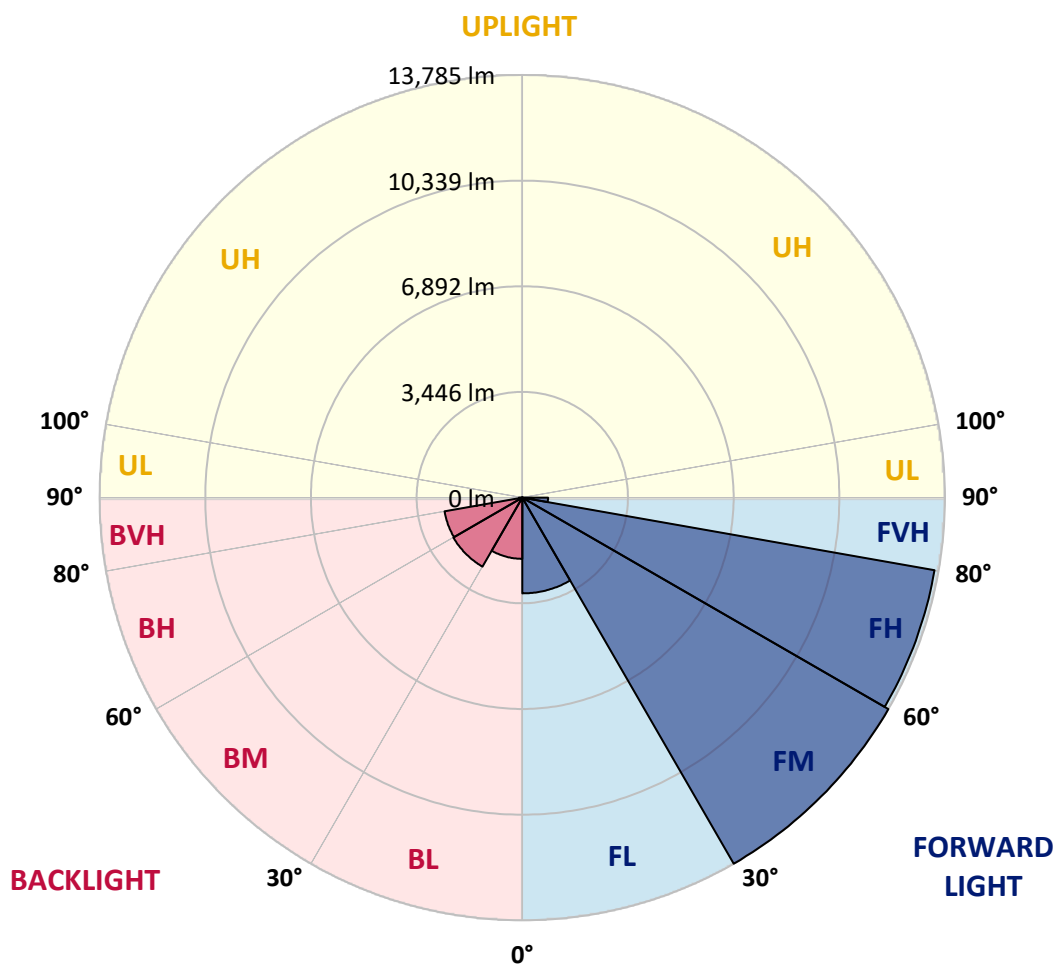
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3122.6	8.1			
FM	(30°-60°)	13784.7	35.6			
FH	(60°-80°)	13650.7	35.3			G5
FVH	(80°-90°)	839.7	2.2			G5
BL	(0°-30°)	1996.3	5.2	B3/2500		
BM	(30°-60°)	2596.6	6.7	B3/5000		
BH	(60°-80°)	2574.7	6.7	B4/5000		G4/5000
BVH	(80°-90°)	104.8	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0
2.5°	8617.3	8651.6	8690.1	8733.0	8814.3	8859.3	8891.4	8927.8	8932.1	8951.4	8936.4
5°	7981.3	8022.0	8079.8	8161.2	8283.3	8473.8	8670.9	8831.5	8850.7	8940.7	8966.4
7.5°	7450.2	7473.8	7520.9	7651.5	7825.0	8037.0	8323.9	8649.4	8696.6	8910.7	8985.7
10°	7017.6	7041.2	7096.9	7231.8	7403.1	7668.6	7983.4	8411.7	8450.3	8818.6	8989.9
12.5°	6694.3	6715.7	6775.6	6908.4	7105.4	7353.8	7700.8	8154.8	8210.4	8696.6	8949.3
15°	6448.0	6488.7	6537.9	6647.2	6854.9	7094.7	7430.9	7919.2	7964.2	8568.1	8921.4
17.5°	6343.1	6362.3	6396.6	6497.3	6649.3	6884.9	7223.2	7735.0	7788.6	8478.1	8915.0
20°	6347.4	6366.6	6373.0	6428.7	6537.9	6741.4	7075.5	7589.4	7653.7	8398.9	8925.7
22.5°	6493.0	6495.1	6471.6	6452.3	6495.1	6664.3	6970.5	7480.2	7555.1	8364.6	8934.3
25°	6717.8	6756.4	6722.1	6632.2	6552.9	6634.3	6929.8	7420.2	7490.9	8315.4	8923.6
27.5°	7081.9	7088.3	7060.5	6938.4	6732.8	6672.9	6912.7	7375.3	7435.2	8279.0	8870.0
30°	7570.1	7550.9	7525.2	7390.3	7066.9	6820.6	6949.1	7334.6	7396.7	8225.4	8805.8
32.5°	8064.8	8124.8	8101.2	7942.8	7523.0	7107.6	7066.9	7330.3	7381.7	8184.7	8735.1
35°	8589.5	8617.3	8728.7	8647.3	8216.9	7572.3	7287.5	7396.7	7437.4	8186.9	8685.8
37.5°	9000.6	9075.6	9336.9	9407.5	9002.8	8186.9	7645.1	7585.1	7602.3	8291.8	8705.1
40°	9497.5	9626.0	9962.2	10251.3	9985.7	8985.7	8253.3	7934.2	7955.6	8544.5	8831.5
42.5°	10127.1	10217.0	10668.9	11060.8	11017.9	10041.4	8989.9	8506.0	8516.7	9047.8	9184.8
45°	10863.7	10992.2	11499.8	12088.7	12189.3	11236.4	10054.3	9371.1	9364.7	9829.4	9844.4
47.5°	11806.0	11885.2	12388.5	13030.9	13437.8	12737.5	11345.6	10613.2	10544.7	10968.7	10846.6
50°	12673.3	12797.5	13178.7	13881.1	14894.0	14495.7	13043.8	12223.6	12063.0	12459.1	12253.6
52.5°	13037.3	13168.0	13489.2	14360.8	16142.5	16769.9	15200.2	14144.5	13876.8	14180.9	14105.9
55°	12405.6	12574.8	12874.6	13934.6	16690.7	19393.3	18108.4	16365.2	16170.3	16039.7	16061.1
57.5°	10707.4	10868.0	11272.8	12442.0	16035.4	21297.0	22260.7	19219.8	18802.2	18200.5	18303.2
60°	8150.5	8251.1	8461.0	9756.6	14093.1	21791.7	26976.2	22828.2	22562.6	20352.6	20425.4
62.5°	5788.4	5901.9	6047.5	6694.3	10317.7	20397.6	30668.2	27867.1	26918.4	22581.9	22511.3
65°	4700.6	4623.5	4799.1	5101.0	6054.0	15808.4	31499.0	34861.2	33554.9	25517.9	24537.1
67.5°	3865.4	3784.0	3957.5	4495.0	4604.2	9176.2	28505.3	39401.1	39139.9	28710.8	26595.1
69°	3422.1	3379.3	3531.3	4143.8	4420.0	6516.5	24832.6	40032.9	40095.0	30593.2	26912.0
70°	3083.7	3100.9	3248.6	3966.0	4336.5	5373.0	21224.2	39161.3	39688.1	31533.3	26569.4
72.5°	2270.0	2306.4	2512.0	3285.0	4257.3	4559.2	12630.5	34205.9	35137.4	31589.0	24305.8
75°	1586.8	1569.7	1751.7	2473.4	4021.7	4518.5	7418.1	26453.7	27509.5	27303.9	20423.3
77.5°	1038.6	1066.5	1212.1	1747.4	3383.5	4484.3	4835.5	18767.9	19453.2	18260.4	12080.1
80°	732.4	730.2	811.6	1192.8	2509.8	4308.7	3959.6	11829.5	11656.1	7176.1	3582.7
82.5°	419.7	449.7	543.9	839.5	1678.9	3792.6	3642.7	5657.8	5165.3	2045.1	1209.9
85°	233.4	244.1	323.4	507.5	980.8	2856.7	3180.1	2574.1	2428.4	854.5	520.4
87.5°	75.0	81.4	134.9	257.0	445.4	1349.1	1801.0	1188.5	1096.4	308.4	209.9
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°	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0	8930.0
2.5°	8942.8	8968.5	8900.0	8833.6	8773.6	8690.1	8615.2	8553.1	8510.2	8503.8	8482.4
5°	8972.8	8974.9	8844.3	8668.7	8497.4	8308.9	8114.1	7974.9	7844.2	7771.4	7735.0
7.5°	8994.2	8974.9	8739.4	8454.6	8124.8	7782.1	7439.5	7165.4	6953.4	6869.9	6902.0
10°	8985.7	8925.7	8580.9	8124.8	7645.1	7133.3	6640.7	6255.3	5901.9	5719.9	5724.2
12.5°	8938.5	8840.0	8345.4	7754.3	7049.8	6364.5	5610.7	5090.3	4681.3	4439.3	4364.3
15°	8897.9	8726.5	8069.1	7251.1	6375.2	5396.5	4477.8	3835.4	3492.8	3302.2	3300.0
17.5°	8855.0	8617.3	7767.2	6717.8	5600.0	4340.8	3377.1	2886.7	2726.1	2745.4	2713.3
20°	8810.1	8488.8	7452.4	6124.6	4655.6	3237.9	2529.1	2329.9	2374.9	2462.7	2475.6
22.5°	8758.7	8351.8	7114.0	5471.5	3661.9	2437.0	2051.5	2021.6	2137.2	2274.3	2293.5
25°	8679.4	8180.5	6687.8	4788.4	2824.6	1963.7	1796.7	1818.1	1931.6	2047.3	2060.1
27.5°	8568.1	7968.5	6257.4	3936.0	2122.2	1685.3	1642.5	1670.4	1726.0	1796.7	1813.8
30°	8418.2	7728.6	5762.7	3199.4	1700.3	1546.1	1529.0	1544.0	1576.1	1606.1	1614.7
32.5°	8268.3	7497.3	5263.8	2449.9	1516.2	1454.1	1436.9	1436.9	1436.9	1441.2	1443.4
35°	8129.1	7278.9	4728.4	1908.1	1419.8	1381.3	1357.7	1332.0	1327.7	1312.7	1312.7
37.5°	8052.0	7079.7	4158.8	1597.5	1349.1	1321.3	1289.2	1246.3	1222.8	1224.9	1220.6
40°	8067.0	6949.1	3640.5	1421.9	1291.3	1261.3	1212.1	1162.8	1147.8	1147.8	1143.6
42.5°	8236.1	6906.3	3143.7	1329.9	1235.6	1201.4	1139.3	1094.3	1085.7	1083.6	1087.9
45°	8625.9	7011.2	2698.3	1269.9	1188.5	1137.1	1075.0	1034.3	1025.8	1025.8	1023.6
47.5°	9386.1	7351.7	2379.2	1231.4	1154.3	1087.9	1023.6	982.9	967.9	963.7	963.7
50°	10568.2	8090.5	2141.5	1197.1	1111.4	1042.9	976.5	929.4	905.8	903.7	901.6
52.5°	12210.7	9242.6	2049.4	1171.4	1064.3	995.8	923.0	878.0	848.0	841.6	837.3
55°	14131.6	10850.9	2175.7	1152.1	1015.1	942.3	867.3	820.2	792.3	779.5	777.4
57.5°	16356.6	12782.5	2655.4	1126.4	970.1	884.4	811.6	764.5	734.5	719.5	715.3
60°	18354.6	14767.7	3492.8	1111.4	931.5	822.3	747.4	704.5	676.7	661.7	659.6
62.5°	20549.7	16660.7	4492.8	1152.1	914.4	762.4	687.4	648.9	625.3	610.3	610.3
65°	22894.6	18555.9	5154.5	1289.2	940.1	715.3	623.2	591.0	569.6	558.9	556.8
67.5°	24475.0	19211.2	4246.6	1430.5	1004.4	663.9	561.1	535.4	522.5	511.8	511.8
69°	24303.7	18382.5	3133.0	1466.9	1023.6	638.2	526.8	507.5	490.4	486.1	481.8
70°	23761.9	17438.1	2625.5	1443.4	1008.6	614.6	505.4	481.8	466.8	462.6	460.4
72.5°	21164.3	15123.1	1955.2	1254.9	858.7	533.2	447.6	426.2	413.3	406.9	406.9
75°	17583.7	12360.6	1526.9	997.9	672.4	449.7	383.3	366.2	355.5	351.2	349.1
77.5°	9855.1	6902.0	1096.4	781.6	509.7	364.1	321.2	306.2	295.5	291.2	291.2
80°	2745.4	1972.3	644.6	516.1	346.9	276.3	254.8	244.1	229.1	218.4	224.9
82.5°	1034.3	854.5	368.3	310.5	220.6	184.2	177.7	169.2	162.8	147.8	147.8
85°	503.2	415.4	235.6	164.9	122.1	96.4	92.1	87.8	83.5	72.8	75.0
87.5°	173.5	184.2	102.8	60.0	36.4	23.6	19.3	10.7	10.7	10.7	10.7
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)