

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: P453942

Luminaire Tested: **GALN-SA5A-730-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453942  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5A-730-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20415 lumens  
Efficiency: N/A  
Efficacy: 132.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

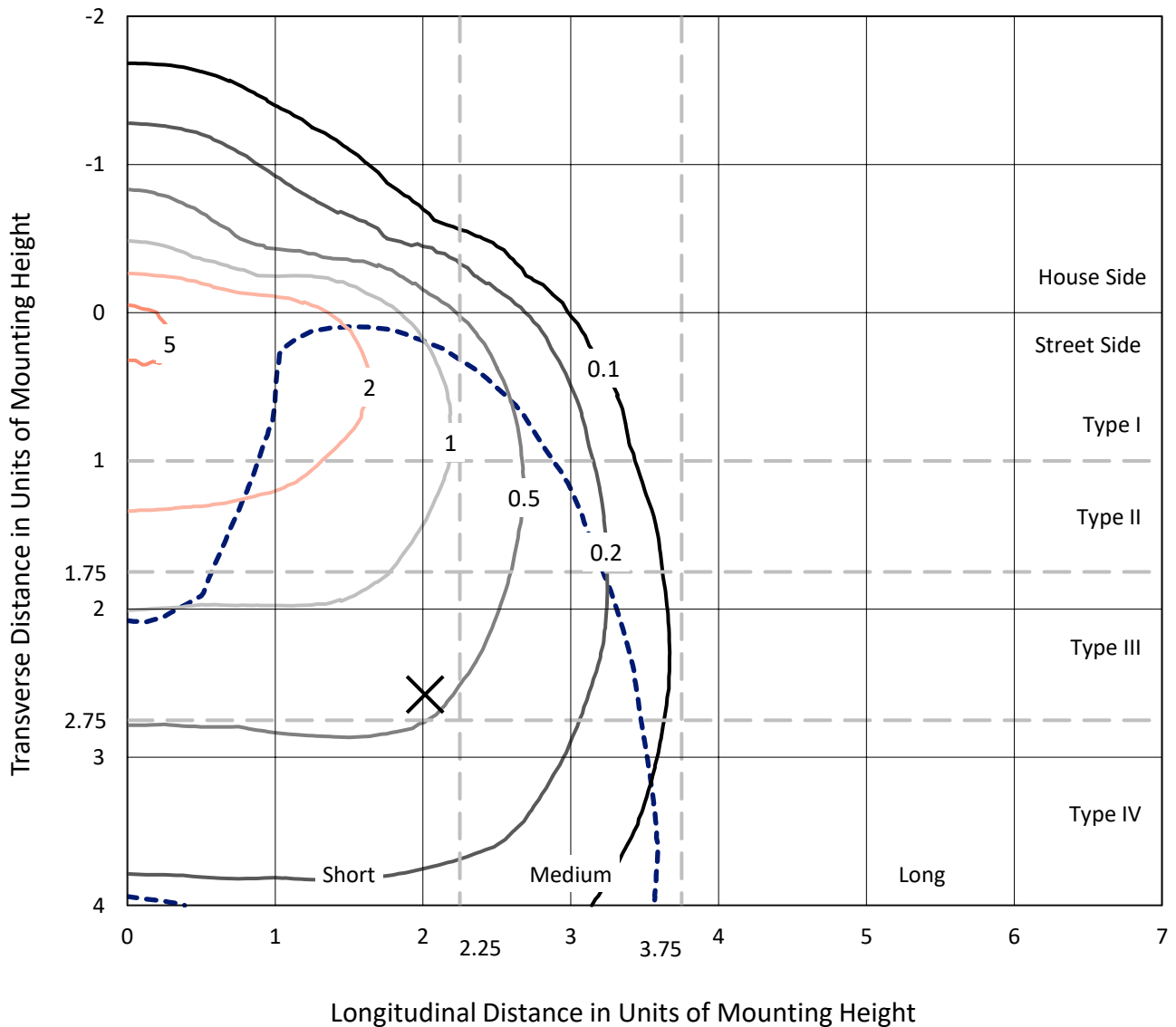
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P453942  
 CATALOG NUMBER: GALN-SA5A-730-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

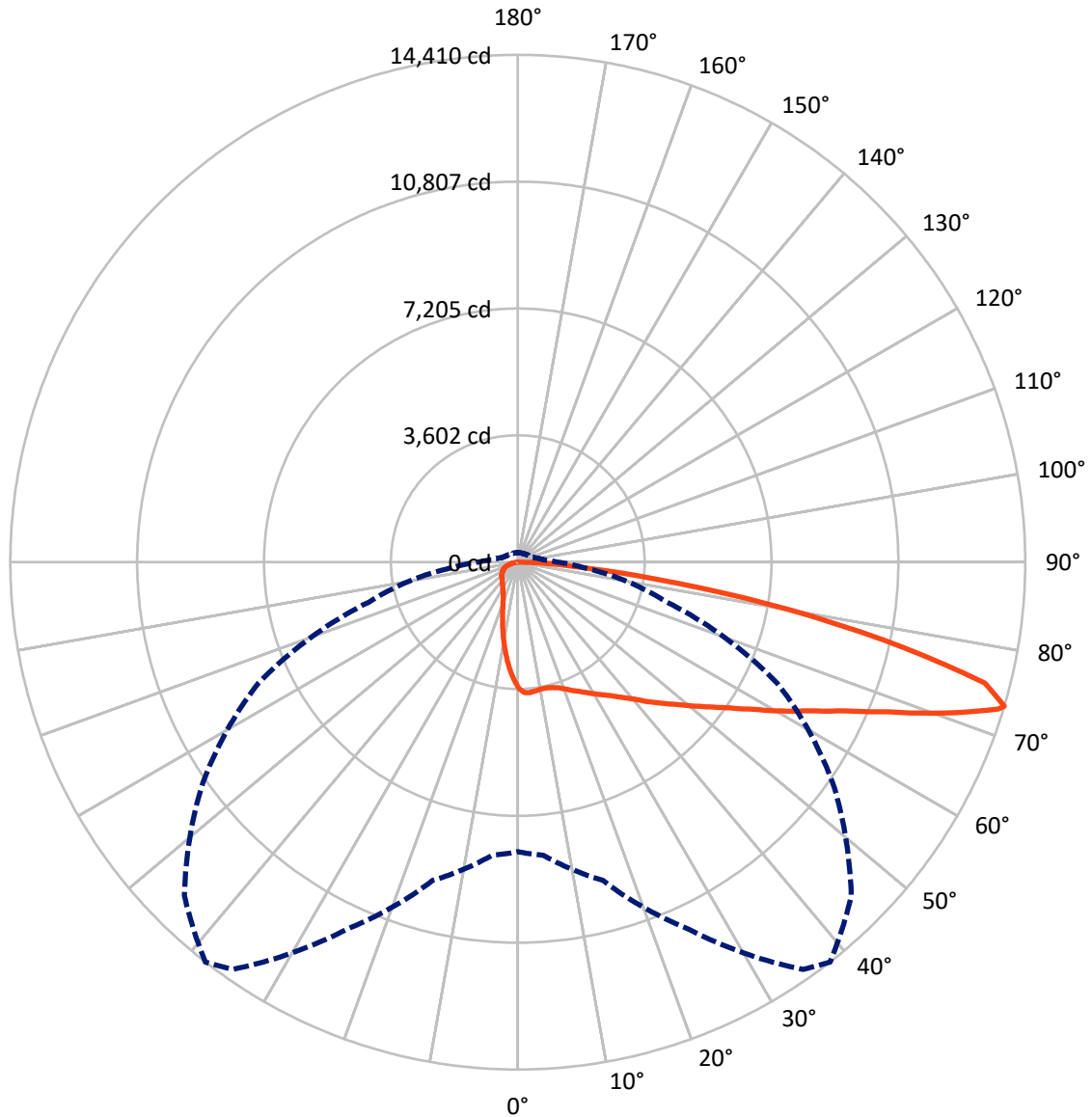
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type IV - Short - N/A

REPORT NUMBER: P453942  
CATALOG NUMBER: GALN-SA5A-730-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P453942

CATALOG NUMBER: GALN-SA5A-730-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2744.4	0.0	2744.4
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	17670.6	0.0	17670.6
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	20415.0	0.0	20415.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	313.1	1.5
10°-20°	802.8	3.9
20°-30°	1250.1	6.1
30°-40°	1833.7	9.0
40°-50°	2720.0	13.3
50°-60°	3853.7	18.9
60°-70°	4888.6	23.9
70°-80°	4069.4	19.9
80°-90°	683.7	3.3
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°	20415.0	100.0
0°-180°	20415.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P453942

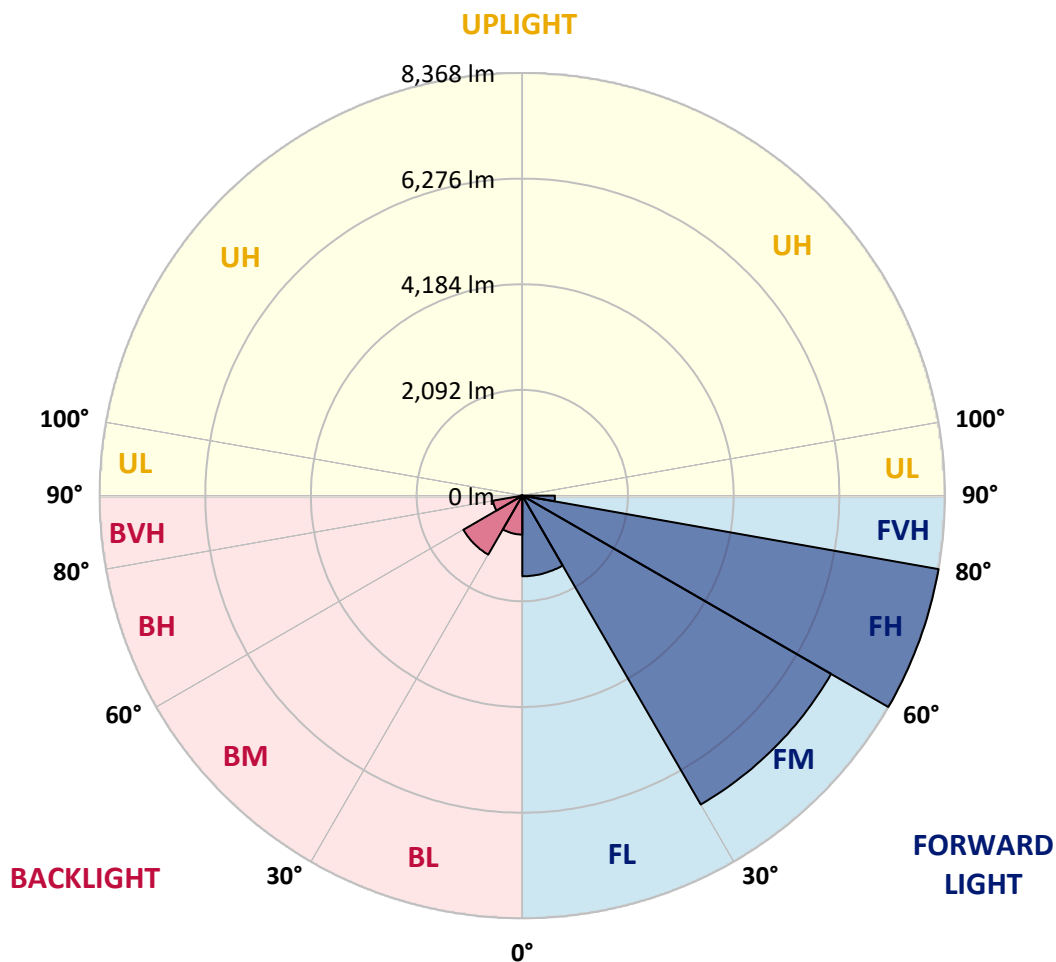
CATALOG NUMBER: GALN-SA5A-730-U-SL4

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1595.9	7.8			
FM	(30°-60°)	7060.1	34.6			
FH	(60°-80°)	8368.0	41.0			G4/12000
FVH	(80°-90°)	646.6	3.2			G4/750
BL	(0°-30°)	770.1	3.8	B2/1000		
BM	(30°-60°)	1347.3	6.6	B2/2500		
BH	(60°-80°)	589.9	2.9	B2/1000		G2/1000
BVH	(80°-90°)	37.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Short





REPORT NUMBER: P453942

CATALOG NUMBER: GALN-SA5A-730-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6
2.5°	3730.7	3749.1	3739.9	3727.2	3719.1	3711.1	3699.6	3666.1	3639.6	3610.8	3565.8
5°	3758.3	3769.9	3761.8	3745.7	3727.2	3719.1	3697.2	3653.4	3610.8	3562.4	3495.5
7.5°	3742.2	3746.8	3737.6	3718.0	3701.9	3686.9	3661.5	3613.1	3561.2	3502.4	3414.8
10°	3684.6	3701.9	3701.9	3685.7	3669.6	3661.5	3636.1	3590.0	3542.8	3475.9	3372.1
12.5°	3637.3	3655.7	3670.7	3666.1	3665.0	3665.0	3645.4	3610.8	3555.4	3492.0	3368.7
15°	3605.0	3626.9	3659.2	3677.6	3689.2	3692.6	3684.6	3654.6	3598.1	3524.3	3382.5
17.5°	3598.1	3624.6	3683.4	3723.8	3753.7	3752.6	3750.3	3708.8	3646.5	3570.4	3399.8
20°	3629.2	3663.8	3745.7	3809.1	3852.9	3844.8	3832.1	3777.9	3705.3	3620.0	3415.9
22.5°	3722.6	3758.3	3848.3	3917.4	3960.1	3960.1	3922.1	3850.6	3773.3	3677.6	3437.8
25°	3856.3	3895.5	3991.2	4061.6	4081.1	4066.2	4028.1	3941.7	3852.9	3760.7	3484.0
27.5°	4020.0	4067.3	4156.1	4214.9	4209.1	4197.6	4158.4	4047.7	3958.9	3874.8	3562.4
30°	4224.1	4258.7	4350.9	4364.8	4344.0	4341.7	4286.4	4175.7	4092.7	4028.1	3674.2
32.5°	4416.6	4447.8	4521.5	4527.3	4490.4	4495.0	4443.1	4341.7	4294.4	4271.4	3862.1
35°	4620.7	4636.8	4700.2	4693.3	4669.1	4665.7	4644.9	4548.1	4563.0	4604.6	4128.4
37.5°	4791.3	4823.6	4859.3	4865.1	4863.9	4875.5	4889.3	4843.2	4929.7	5059.9	4477.7
40°	4948.1	4975.8	5028.8	5047.3	5092.2	5115.3	5162.5	5163.7	5363.1	5577.6	4907.8
42.5°	5054.2	5101.4	5200.6	5234.0	5343.5	5412.7	5483.0	5558.0	5847.3	6122.9	5415.0
45°	5146.4	5208.7	5373.5	5477.3	5626.0	5710.2	5858.9	6015.7	6431.8	6792.7	5930.3
47.5°	5285.9	5341.2	5530.3	5713.6	5938.4	6035.3	6257.8	6491.8	7035.9	7431.4	6423.8
50°	5479.6	5513.0	5705.5	6004.1	6291.2	6415.7	6709.7	7047.5	7681.6	8062.0	6857.3
52.5°	5727.4	5741.3	5894.6	6292.3	6670.5	6825.0	7214.6	7608.9	8246.5	8609.6	7200.8
55°	6020.3	5997.2	6117.1	6597.9	7104.0	7305.7	7724.2	8177.3	8881.7	9052.3	7451.0
57.5°	6309.6	6273.9	6369.6	6969.1	7638.9	7882.2	8369.8	8762.9	9448.9	9466.2	7626.2
60°	6616.3	6589.8	6703.9	7404.9	8294.9	8583.1	9033.9	9370.5	9997.7	9754.4	7653.9
62.5°	6931.0	6888.4	7050.9	7894.8	9033.9	9295.6	9732.5	10016.1	10536.1	9861.6	7387.6
65°	7236.5	7216.9	7468.3	8477.0	9875.5	10172.9	10597.2	10789.7	10967.2	9700.2	6727.0
67.5°	7561.7	7600.9	8002.1	9254.1	10973.0	11346.5	11804.2	11623.2	11090.6	8935.9	5665.2
70°	8057.4	8082.8	8703.0	10272.0	12387.6	12838.3	13059.7	11919.5	10495.7	7484.4	4258.7
72.5°	8270.7	8382.5	9329.0	11340.8	13994.7	14270.2	13481.6	11258.9	8743.3	5084.1	2237.7
73°	8223.4	8357.1	9357.8	11503.3	14120.3	14409.7	13391.7	10918.8	8127.7	4378.6	1918.4
75°	7634.3	7799.1	8983.1	11367.3	13875.9	13703.0	11946.0	9305.9	5492.3	1991.0	873.9
77.5°	6023.7	6071.0	7117.8	9179.1	10926.9	10606.4	8940.5	5816.2	2243.5	740.1	495.7
80°	3021.7	3195.7	4012.0	5258.2	7306.9	7202.0	5643.3	2750.7	935.0	434.6	328.6
82.5°	1453.8	1577.1	1954.1	2564.0	4037.3	3941.7	2794.5	1503.3	593.7	253.6	193.7
85°	936.1	1028.4	1243.9	1223.2	1660.1	1585.2	1255.5	1137.9	351.6	132.6	134.9
87.5°	617.9	676.7	811.6	649.1	604.1	546.5	554.5	641.0	69.2	50.7	18.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P453942  
 CATALOG NUMBER: GALN-SA5A-730-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6	3586.6
2.5°	3547.4	3532.4	3482.8	3434.4	3388.3	3344.5	3315.6	3277.6	3252.2	3259.2	3269.5
5°	3458.6	3425.2	3337.6	3252.2	3171.5	3075.8	2998.6	2936.4	2889.1	2871.8	2868.3
7.5°	3365.2	3308.7	3183.1	3036.7	2899.5	2780.7	2643.5	2575.5	2496.0	2468.3	2459.1
10°	3308.7	3232.6	3056.3	2852.2	2645.8	2448.7	2300.0	2178.9	2069.4	2048.6	2038.3
12.5°	3292.6	3192.3	2954.8	2691.9	2417.6	2175.5	1955.3	1796.2	1690.1	1665.9	1630.2
15°	3283.4	3158.9	2860.3	2530.5	2182.4	1887.2	1655.5	1469.9	1373.1	1308.5	1309.7
17.5°	3275.3	3120.8	2754.2	2354.2	1979.5	1639.4	1383.4	1216.3	1127.5	1092.9	1089.5
20°	3263.8	3075.8	2632.0	2168.5	1747.7	1413.4	1181.7	1057.2	997.2	968.4	967.3
22.5°	3259.2	3032.0	2512.1	1979.5	1542.5	1239.3	1048.0	960.3	922.3	902.7	902.7
25°	3270.7	3000.9	2386.4	1799.6	1360.4	1090.6	955.7	895.8	873.9	863.5	860.0
27.5°	3306.4	2987.1	2261.9	1619.8	1193.2	989.2	893.5	852.0	835.8	827.8	828.9
30°	3374.4	2985.9	2139.7	1442.2	1068.7	911.9	843.9	815.1	802.4	797.8	796.6
32.5°	3484.0	3011.3	2019.8	1295.8	963.8	847.4	797.8	777.0	771.3	767.8	766.7
35°	3669.6	3082.8	1901.1	1162.1	883.1	789.7	754.0	743.6	735.5	739.0	740.1
37.5°	3919.7	3206.1	1788.1	1057.2	822.0	747.1	717.1	707.9	703.2	706.7	710.2
40°	4255.2	3383.7	1693.6	973.0	778.2	711.3	684.8	676.7	672.1	677.9	679.0
42.5°	4625.3	3588.9	1615.2	907.3	742.4	681.3	656.0	646.8	643.3	646.8	647.9
45°	5005.7	3827.5	1574.8	860.0	712.5	659.4	632.9	622.5	614.5	612.2	615.6
47.5°	5380.4	4035.0	1573.7	831.2	688.3	639.8	611.0	599.5	589.1	583.4	582.2
50°	5685.9	4199.9	1601.3	818.5	667.5	617.9	589.1	577.6	563.8	552.2	554.5
52.5°	5916.5	4307.1	1614.0	812.8	656.0	594.9	566.1	555.7	539.5	524.6	524.6
55°	6065.2	4332.5	1582.9	807.0	646.8	570.7	539.5	530.3	514.2	499.2	499.2
57.5°	6116.0	4254.1	1471.1	793.2	637.5	549.9	513.0	505.0	492.3	477.3	475.0
60°	5998.4	3988.9	1275.1	751.7	619.1	528.0	484.2	480.7	476.1	463.5	462.3
62.5°	5545.3	3426.3	1061.8	697.5	588.0	505.0	457.7	463.5	466.9	460.0	458.8
65°	4791.3	2781.9	907.3	622.5	546.5	472.7	428.9	443.9	453.1	453.1	450.8
67.5°	3886.3	2136.3	764.4	558.0	494.6	428.9	396.6	408.1	415.0	412.7	418.5
70°	2762.3	1446.8	622.5	484.2	428.9	379.3	355.1	355.1	350.5	348.2	348.2
72.5°	1339.6	826.6	505.0	404.7	365.5	324.0	304.4	296.3	287.1	285.9	280.1
73°	1119.4	741.3	481.9	389.7	350.5	315.9	294.0	281.3	275.5	270.9	269.8
75°	681.3	562.6	402.4	328.6	298.6	272.1	252.5	240.9	235.2	231.7	230.6
77.5°	448.5	419.6	312.4	251.3	228.3	212.1	204.1	192.5	189.1	184.5	184.5
80°	334.3	320.5	223.7	177.5	163.7	149.9	147.6	145.3	136.0	130.3	128.0
82.5°	215.6	228.3	152.2	118.7	103.8	92.2	93.4	96.8	87.6	79.5	77.2
85°	153.3	164.9	92.2	54.2	43.8	38.0	42.7	38.0	39.2	31.1	25.4
87.5°	25.4	43.8	16.1	6.9	3.5	2.3	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)