

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: P452086

Luminaire Tested: **GALN-SA3A-730-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P452086  
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-SA3A-730-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 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: 12170 lumens  
Efficiency: N/A  
Efficacy: 130.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

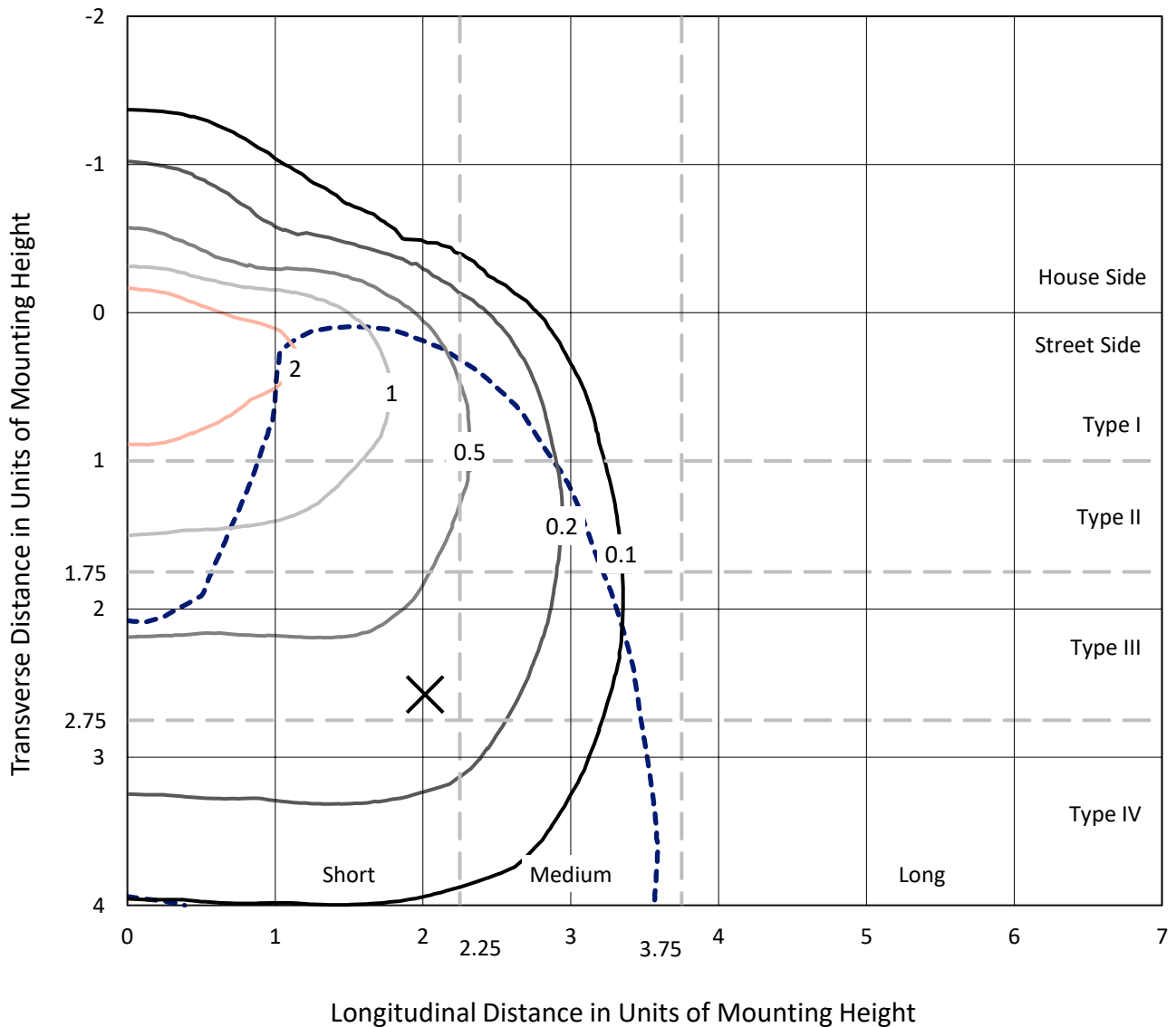
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P452086  
 CATALOG NUMBER: GALN-SA3A-730-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

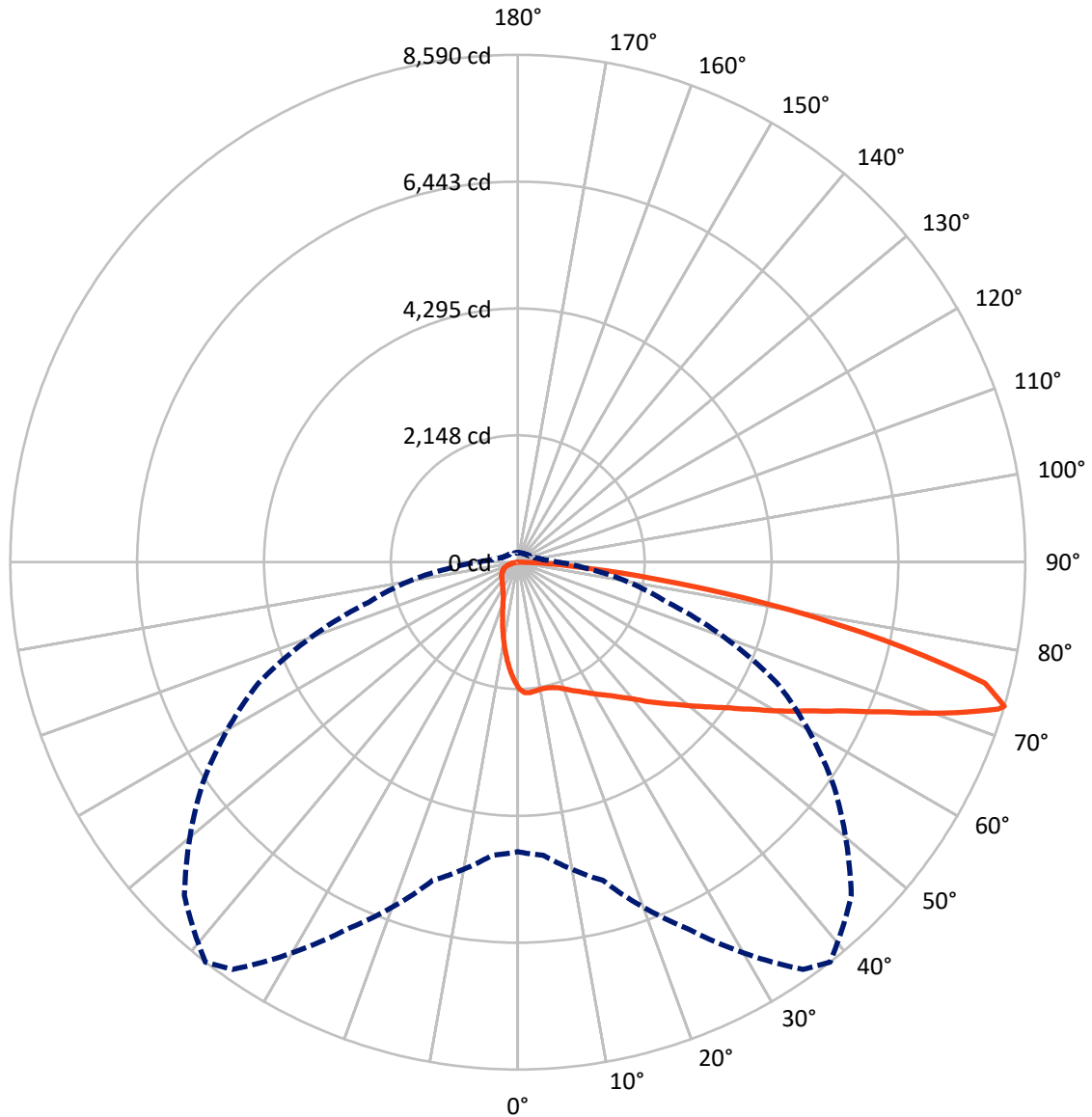
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc  
 Type IV - Short - N/A

REPORT NUMBER: P452086  
CATALOG NUMBER: GALN-SA3A-730-U-SL4

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P452086

CATALOG NUMBER: GALN-SA3A-730-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1636.0	0.0	1636.0
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	10534.0	0.0	10534.0
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	12170.0	0.0	12170.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.6	1.5
10°-20°	478.6	3.9
20°-30°	745.2	6.1
30°-40°	1093.1	9.0
40°-50°	1621.5	13.3
50°-60°	2297.3	18.9
60°-70°	2914.2	23.9
70°-80°	2425.9	19.9
80°-90°	407.6	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°	12170.0	100.0
0°-180°	12170.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P452086

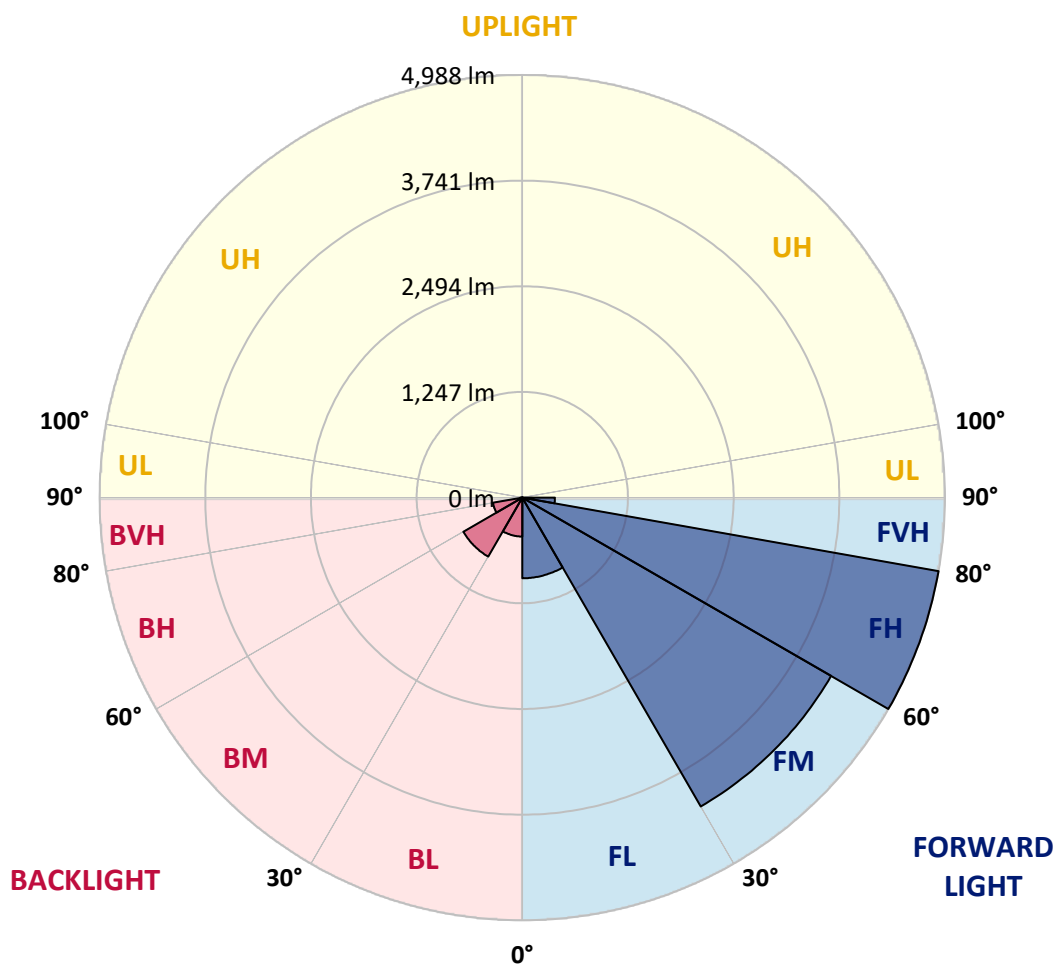
CATALOG NUMBER: GALN-SA3A-730-U-SL4

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	951.4	7.8			
FM	(30°-60°)	4208.7	34.6			
FH	(60°-80°)	4988.4	41.0			G2/5000
FVH	(80°-90°)	385.5	3.2			G3/500
BL	(0°-30°)	459.1	3.8	B1/500		
BM	(30°-60°)	803.2	6.6	B1/1000		
BH	(60°-80°)	351.6	2.9	B1/500		G1/500
BVH	(80°-90°)	22.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





REPORT NUMBER: P452086

CATALOG NUMBER: GALN-SA3A-730-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1
2.5°	2224.0	2235.0	2229.5	2221.9	2217.1	2212.3	2205.4	2185.5	2169.7	2152.5	2125.7
5°	2240.5	2247.3	2242.5	2232.9	2221.9	2217.1	2204.0	2177.9	2152.5	2123.6	2083.8
7.5°	2230.8	2233.6	2228.1	2216.4	2206.8	2197.9	2182.7	2153.9	2122.9	2087.9	2035.7
10°	2196.5	2206.8	2206.8	2197.2	2187.5	2182.7	2167.6	2140.1	2111.9	2072.1	2010.2
12.5°	2168.3	2179.3	2188.2	2185.5	2184.8	2184.8	2173.1	2152.5	2119.5	2081.7	2008.2
15°	2149.1	2162.1	2181.4	2192.4	2199.2	2201.3	2196.5	2178.6	2144.9	2101.0	2016.4
17.5°	2144.9	2160.7	2195.8	2219.8	2237.7	2237.0	2235.7	2210.9	2173.8	2128.4	2026.7
20°	2163.5	2184.1	2232.9	2270.7	2296.8	2292.0	2284.4	2252.1	2208.9	2158.0	2036.3
22.5°	2219.2	2240.5	2294.1	2335.3	2360.7	2360.7	2338.1	2295.4	2249.4	2192.4	2049.4
25°	2298.9	2322.2	2379.3	2421.2	2432.9	2424.0	2401.3	2349.7	2296.8	2241.8	2076.9
27.5°	2396.5	2424.6	2477.6	2512.6	2509.2	2502.3	2478.9	2413.0	2360.0	2309.9	2123.6
30°	2518.1	2538.7	2593.7	2602.0	2589.6	2588.2	2555.2	2489.3	2439.8	2401.3	2190.3
32.5°	2632.9	2651.4	2695.4	2698.9	2676.9	2679.6	2648.7	2588.2	2560.0	2546.3	2302.3
35°	2754.5	2764.2	2802.0	2797.8	2783.4	2781.3	2769.0	2711.2	2720.2	2744.9	2461.1
37.5°	2856.2	2875.5	2896.8	2900.2	2899.5	2906.4	2914.7	2887.2	2938.7	3016.4	2669.3
40°	2949.7	2966.2	2997.8	3008.8	3035.6	3049.4	3077.5	3078.2	3197.1	3325.0	2925.7
42.5°	3012.9	3041.1	3100.2	3120.2	3185.4	3226.7	3268.6	3313.3	3485.8	3650.0	3228.1
45°	3067.9	3105.0	3203.3	3265.2	3353.8	3404.0	3492.7	3586.1	3834.2	4049.3	3535.3
47.5°	3151.1	3184.1	3296.8	3406.1	3540.1	3597.8	3730.4	3870.0	4194.3	4430.1	3829.4
50°	3266.5	3286.5	3401.2	3579.2	3750.4	3824.6	3999.8	4201.2	4579.2	4806.0	4087.8
52.5°	3414.3	3422.5	3514.0	3751.1	3976.5	4068.6	4300.9	4535.9	4916.0	5132.5	4292.6
55°	3588.9	3575.1	3646.6	3933.2	4234.9	4355.2	4604.6	4874.7	5294.6	5396.4	4441.8
57.5°	3761.4	3740.1	3797.1	4154.5	4553.8	4698.8	4989.5	5223.9	5632.8	5643.1	4546.2
60°	3944.2	3928.4	3996.4	4414.3	4944.8	5116.6	5385.4	5586.0	5959.9	5814.9	4562.7
62.5°	4131.8	4106.4	4203.3	4706.3	5385.4	5541.4	5801.8	5970.9	6280.9	5878.8	4404.0
65°	4313.9	4302.2	4452.1	5053.4	5887.1	6064.4	6317.3	6432.1	6537.9	5782.6	4010.2
67.5°	4507.7	4531.1	4770.3	5516.6	6541.3	6764.0	7036.8	6928.9	6611.4	5326.9	3377.2
70°	4803.3	4818.4	5188.1	6123.5	7384.6	7653.3	7785.3	7105.6	6256.8	4461.7	2538.7
72.5°	4930.4	4997.1	5561.3	6760.6	8342.6	8506.9	8036.8	6711.8	5212.2	3030.8	1334.0
73°	4902.2	4981.9	5578.5	6857.5	8417.5	8590.1	7983.2	6509.0	4845.2	2610.2	1143.6
75°	4551.0	4649.3	5355.1	6776.4	8271.8	8168.8	7121.4	5547.6	3274.1	1186.9	520.9
77.5°	3590.9	3619.1	4243.1	5472.0	6513.8	6322.8	5329.7	3467.2	1337.4	441.2	295.5
80°	1801.3	1905.1	2391.7	3134.6	4355.8	4293.3	3364.1	1639.8	557.4	259.1	195.9
82.5°	866.6	940.2	1164.9	1528.5	2406.8	2349.7	1665.9	896.2	353.9	151.2	115.5
85°	558.1	613.0	741.6	729.2	989.7	945.0	748.4	678.3	209.6	79.0	80.4
87.5°	368.4	403.4	483.8	386.9	360.1	325.8	330.6	382.1	41.2	30.2	11.0
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: P452086  
 CATALOG NUMBER: GALN-SA3A-730-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1	2138.1
2.5°	2114.7	2105.8	2076.2	2047.3	2019.9	1993.7	1976.6	1953.9	1938.8	1942.9	1949.1
5°	2061.8	2041.8	1989.6	1938.8	1890.6	1833.6	1787.6	1750.4	1722.3	1712.0	1709.9
7.5°	2006.1	1972.4	1897.5	1810.2	1728.5	1657.7	1575.9	1535.3	1487.9	1471.4	1465.9
10°	1972.4	1927.1	1821.9	1700.3	1577.3	1459.7	1371.1	1298.9	1233.6	1221.3	1215.1
12.5°	1962.8	1903.0	1761.4	1604.7	1441.2	1296.9	1165.6	1070.7	1007.5	993.1	971.8
15°	1957.3	1883.1	1705.1	1508.5	1301.0	1125.0	986.9	876.3	818.5	780.0	780.7
17.5°	1952.5	1860.4	1641.9	1403.4	1180.0	977.3	824.7	725.1	672.1	651.5	649.5
20°	1945.6	1833.6	1569.0	1292.7	1041.9	842.6	704.4	630.2	594.5	577.3	576.6
22.5°	1942.9	1807.5	1497.5	1180.0	919.6	738.8	624.7	572.5	549.8	538.1	538.1
25°	1949.8	1788.9	1422.6	1072.8	811.0	650.1	569.7	534.0	520.9	514.8	512.7
27.5°	1971.1	1780.7	1348.4	965.6	711.3	589.7	532.6	507.9	498.3	493.5	494.1
30°	2011.6	1780.0	1275.6	859.8	637.1	543.6	503.1	485.9	478.3	475.6	474.9
32.5°	2076.9	1795.1	1204.1	772.5	574.5	505.1	475.6	463.2	459.8	457.7	457.0
35°	2187.5	1837.7	1133.3	692.8	526.4	470.8	449.5	443.3	438.5	440.5	441.2
37.5°	2336.7	1911.3	1065.9	630.2	490.0	445.3	427.5	422.0	419.2	421.3	423.4
40°	2536.7	2017.1	1009.6	580.0	463.9	424.0	408.2	403.4	400.7	404.1	404.8
42.5°	2757.3	2139.4	962.8	540.9	442.6	406.2	391.1	385.6	383.5	385.6	386.2
45°	2984.1	2281.7	938.8	512.7	424.7	393.1	377.3	371.1	366.3	364.9	367.0
47.5°	3207.4	2405.4	938.1	495.5	410.3	381.4	364.2	357.4	351.2	347.8	347.1
50°	3389.6	2503.7	954.6	488.0	397.9	368.4	351.2	344.3	336.1	329.2	330.6
52.5°	3527.0	2567.6	962.2	484.5	391.1	354.6	337.4	331.3	321.6	312.7	312.7
55°	3615.7	2582.7	943.6	481.1	385.6	340.2	321.6	316.1	306.5	297.6	297.6
57.5°	3645.9	2536.0	876.9	472.8	380.1	327.8	305.8	301.0	293.5	284.5	283.2
60°	3575.8	2377.9	760.1	448.1	369.1	314.8	288.6	286.6	283.8	276.3	275.6
62.5°	3305.7	2042.5	633.0	415.8	350.5	301.0	272.8	276.3	278.3	274.2	273.5
65°	2856.2	1658.4	540.9	371.1	325.8	281.8	255.7	264.6	270.1	270.1	268.7
67.5°	2316.8	1273.5	455.7	332.6	294.8	255.7	236.4	243.3	247.4	246.0	249.5
70°	1646.7	862.5	371.1	288.6	255.7	226.1	211.7	211.7	208.9	207.6	207.6
72.5°	798.6	492.8	301.0	241.2	217.9	193.1	181.4	176.6	171.1	170.4	167.0
73°	667.3	441.9	287.3	232.3	208.9	188.3	175.3	167.7	164.3	161.5	160.8
75°	406.2	335.4	239.9	195.9	178.0	162.2	150.5	143.6	140.2	138.1	137.5
77.5°	267.3	250.2	186.2	149.8	136.1	126.5	121.6	114.8	112.7	110.0	110.0
80°	199.3	191.1	133.3	105.8	97.6	89.3	88.0	86.6	81.1	77.7	76.3
82.5°	128.5	136.1	90.7	70.8	61.9	55.0	55.7	57.7	52.2	47.4	46.0
85°	91.4	98.3	55.0	32.3	26.1	22.7	25.4	22.7	23.4	18.6	15.1
87.5°	15.1	26.1	9.6	4.1	2.1	1.4	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)