

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: P453985

Luminaire Tested: **GALN-SA5A-740-U-T4FT-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453985  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5A-740-U-T4FT-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16491 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G4

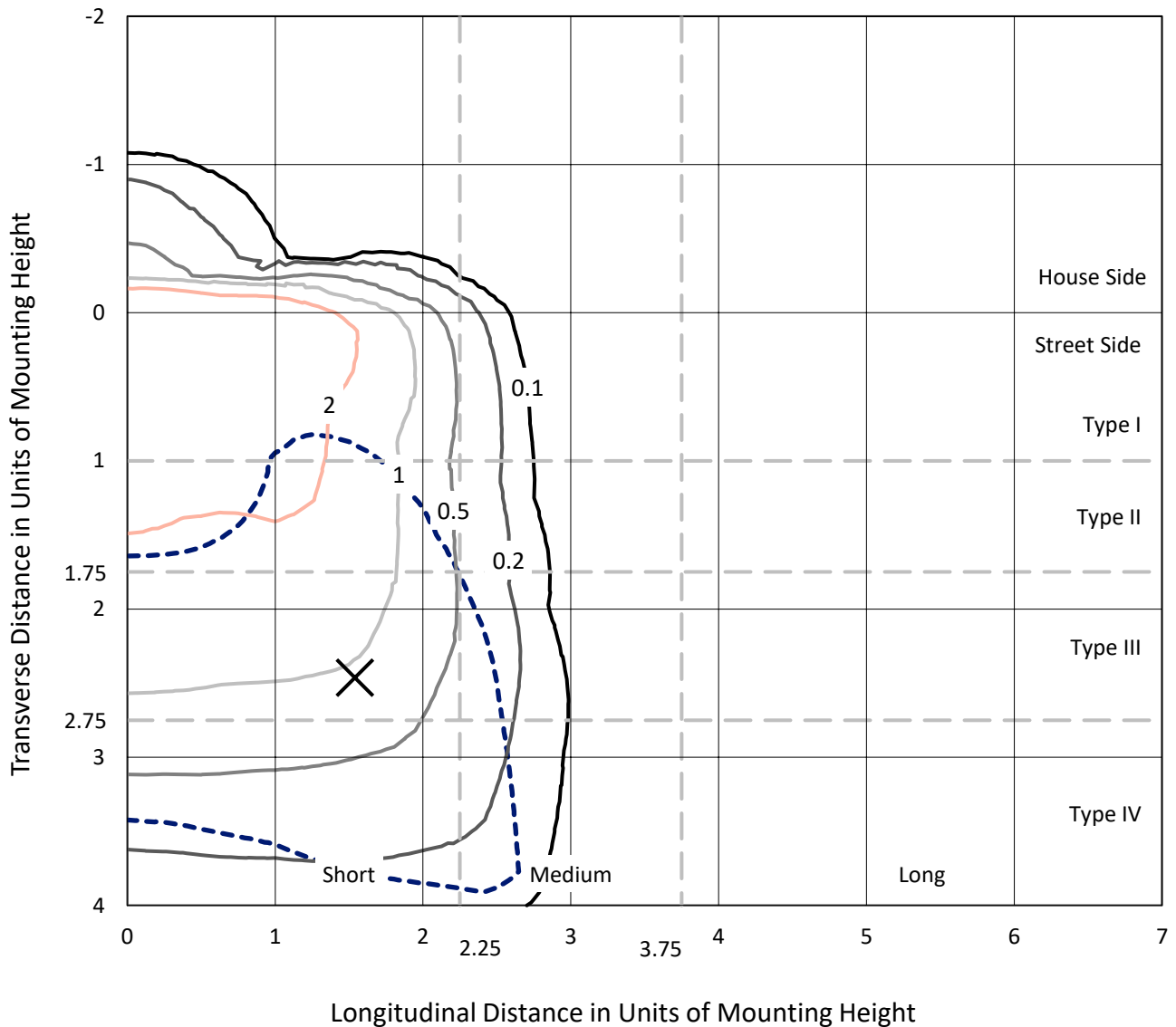
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P453985  
 CATALOG NUMBER: GALN-SA5A-740-U-T4FT-HSS

### Iso-Footcandle Lines of Horizontal Illumination

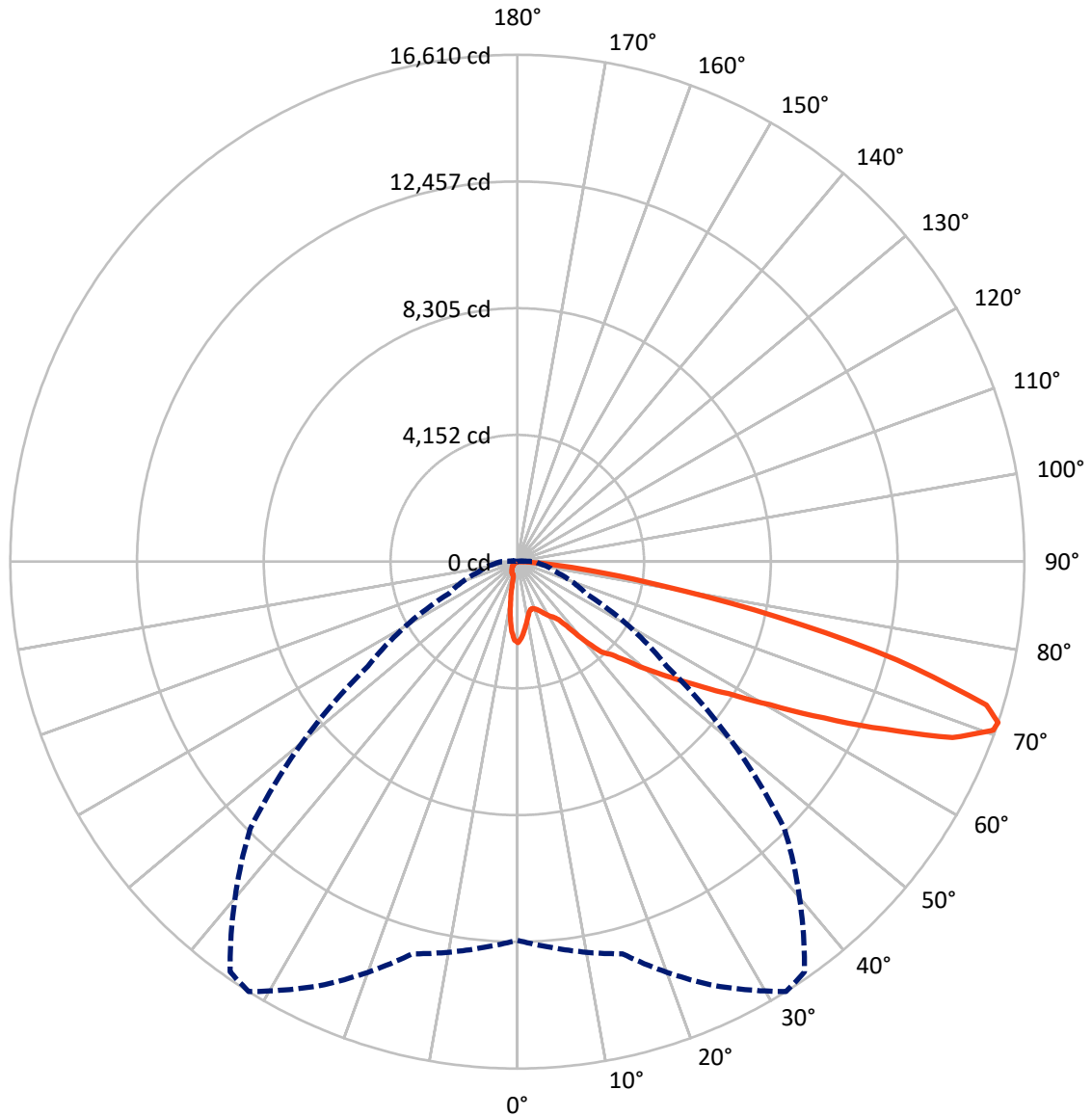
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type IV - Short - N/A

REPORT NUMBER: P453985  
CATALOG NUMBER: GALN-SA5A-740-U-T4FT-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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 CATALOG NUMBER: GALN-SA5A-740-U-T4FT-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1381.3	0.0	1381.3
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	15109.7	0.0	15109.7
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	16491.0	0.0	16491.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.6	1.3
10°-20°	468.0	2.8
20°-30°	728.1	4.4
30°-40°	1213.0	7.4
40°-50°	2256.4	13.7
50°-60°	3622.7	22.0
60°-70°	4872.7	29.5
70°-80°	2891.0	17.5
80°-90°	223.5	1.4
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°	16491.0	100.0
0°-180°	16491.0	100.0



REPORT NUMBER: P453985

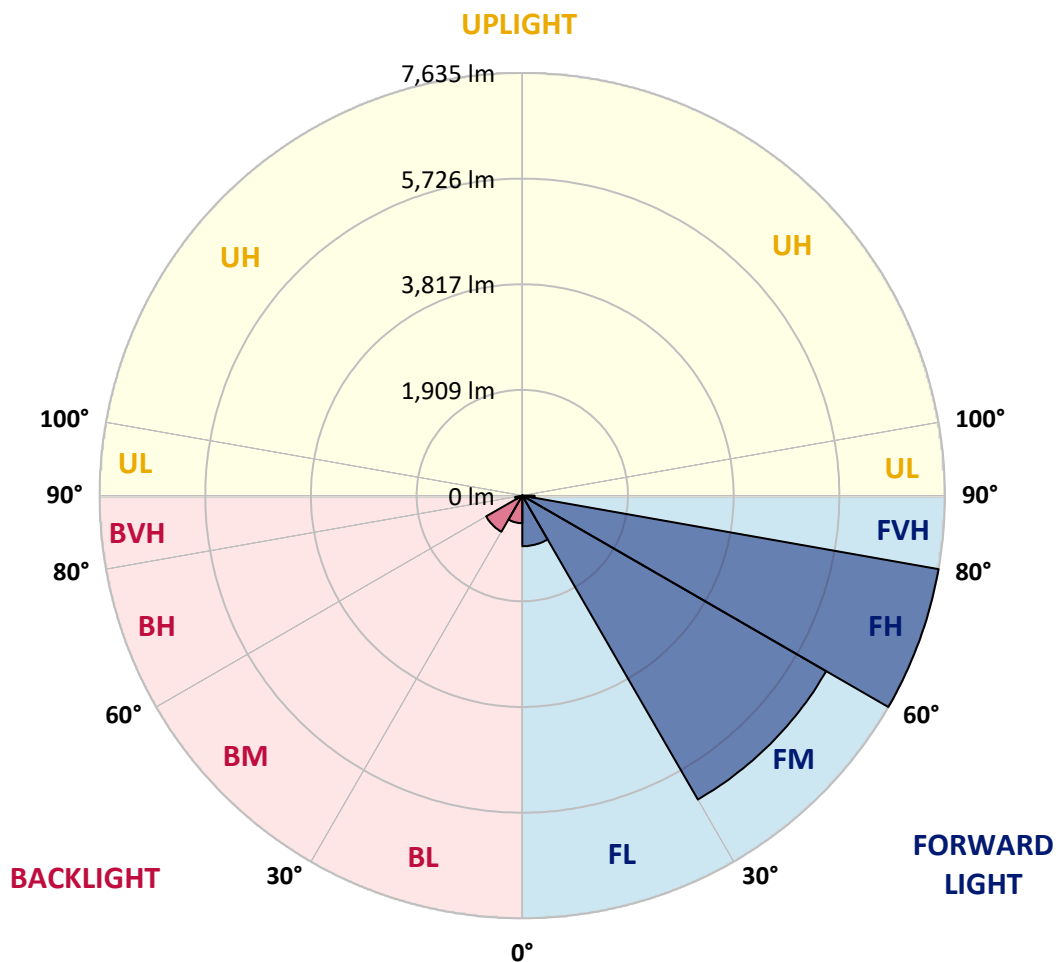
CATALOG NUMBER: GALN-SA5A-740-U-T4FT-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	914.0	5.5			
FM	(30°-60°)	6338.5	38.4			
FH	(60°-80°)	7634.5	46.3			G4/12000
FVH	(80°-90°)	222.6	1.3			G2/225
BL	(0°-30°)	497.7	3.0	B1/500		
BM	(30°-60°)	753.5	4.6	B1/1000		
BH	(60°-80°)	129.2	0.8	B1/500		G1/500
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G4**

Type IV Short





REPORT NUMBER: P453985

CATALOG NUMBER: GALN-SA5A-740-U-T4FT-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0
2.5°	2459.6	2484.9	2481.1	2490.0	2511.5	2520.4	2544.4	2571.0	2607.7	2633.0	2649.5
5°	2202.6	2221.6	2224.1	2268.4	2290.0	2314.0	2384.9	2462.1	2548.2	2616.6	2662.1
7.5°	1927.9	1938.1	1958.3	2016.5	2071.0	2095.0	2202.6	2336.8	2472.3	2600.1	2682.4
10°	1701.3	1712.7	1749.4	1811.5	1862.1	1893.8	2043.1	2211.5	2401.4	2591.2	2711.5
12.5°	1572.2	1578.5	1592.5	1648.2	1712.7	1746.9	1907.7	2100.1	2344.4	2595.0	2760.9
15°	1563.4	1560.8	1544.4	1567.2	1625.4	1660.8	1817.8	2024.1	2293.8	2607.7	2819.1
17.5°	1610.2	1603.9	1564.6	1564.6	1612.7	1641.8	1779.8	1983.6	2268.4	2636.8	2901.4
20°	1682.3	1672.2	1607.7	1602.6	1649.4	1679.8	1802.6	1986.2	2273.5	2691.3	3011.5
22.5°	1773.5	1762.1	1664.6	1667.2	1717.8	1748.2	1868.4	2031.7	2305.2	2758.3	3129.2
25°	1892.5	1879.8	1764.6	1759.6	1812.7	1839.3	1965.9	2112.7	2349.5	2841.9	3283.7
27.5°	2050.7	2024.1	1886.2	1878.6	1935.5	1969.7	2083.6	2221.6	2428.0	2957.1	3491.3
30°	2181.1	2152.0	2020.3	2000.1	2060.8	2087.4	2205.2	2368.5	2582.4	3158.4	3778.6
32.5°	2352.0	2309.0	2154.5	2101.4	2165.9	2200.1	2381.1	2641.9	2811.5	3371.0	4120.4
35°	2736.8	2710.2	2521.6	2335.5	2331.7	2374.8	2640.6	2917.8	3047.0	3702.7	4586.3
37.5°	3287.5	3268.5	3068.5	2819.1	2747.0	2726.7	2955.8	3221.7	3422.9	4158.4	5128.1
40°	3926.7	3882.4	3698.9	3487.5	3393.8	3334.3	3328.0	3673.6	3914.1	4777.4	5692.6
42.5°	4385.0	4304.0	4081.2	4066.0	4045.7	3983.7	3804.0	4334.4	4548.3	5443.3	6296.5
45°	4866.0	4743.2	4411.6	4354.6	4347.0	4343.2	4523.0	5116.7	5239.5	6164.8	6916.7
47.5°	5239.5	5142.0	4869.8	4844.5	4876.2	4962.2	5473.6	5947.1	5921.8	6807.9	7437.0
50°	5737.0	5663.5	5361.0	5409.1	5572.4	5712.9	6545.8	6852.2	6482.6	7314.2	7815.5
52.5°	6324.3	6188.9	5907.8	6038.2	6288.9	6523.1	7683.9	7644.6	6876.2	7695.3	8097.8
55°	6833.2	6737.0	6640.8	6776.2	7150.9	7443.4	8711.8	8238.3	7162.3	8001.6	8221.9
57.5°	7694.0	7671.2	7572.5	7710.5	8164.9	8468.7	9632.1	8699.1	7345.9	8161.1	8076.3
60°	8967.5	8930.8	8747.2	8923.2	9515.6	9992.8	10480.2	9113.0	7387.7	8099.1	7657.3
62.5°	10499.2	10373.9	10216.9	10476.4	11289.1	11499.2	11279.0	9358.6	7232.0	7605.4	6647.1
65°	11929.6	11800.5	11804.3	12351.2	13236.0	13379.0	12210.6	9321.9	6776.2	6368.6	4902.7
67.5°	13024.6	13003.1	13157.5	14224.6	15381.7	15282.9	13043.6	8772.5	5425.5	4128.0	2605.2
70°	13080.3	13122.1	13565.1	15366.5	16541.2	16384.2	12972.7	7130.7	3382.4	1898.8	1026.6
71°	12406.9	12687.9	13300.6	15331.0	16609.6	16405.8	12375.2	5972.4	2481.1	1324.1	740.5
72.5°	10572.6	10720.7	12044.8	14428.5	16069.0	15633.6	10860.0	4186.3	1588.7	810.2	425.3
75°	5823.0	6187.6	8066.2	11319.5	12852.4	12470.1	7077.5	1988.7	792.4	443.1	176.0
77.5°	2772.3	2701.4	3935.6	6731.9	8714.3	8694.0	3566.0	883.6	462.0	300.0	88.6
80°	792.4	891.2	1506.4	3200.1	4838.2	4891.3	1369.7	426.6	320.3	234.2	45.6
82.5°	239.3	244.3	553.2	1415.2	2406.4	2268.4	513.9	217.7	230.4	186.1	26.6
85°	41.8	51.9	163.3	498.8	917.8	696.2	129.1	103.8	151.9	122.8	15.2
87.5°	2.5	3.8	54.4	57.0	81.0	46.8	22.8	15.2	32.9	32.9	8.9
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: P453985

CATALOG NUMBER: GALN-SA5A-740-U-T4FT-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0	2652.0
2.5°	2660.9	2668.5	2663.4	2652.0	2633.0	2610.2	2579.9	2554.5	2533.0	2521.6	2535.5
5°	2677.3	2687.5	2662.1	2605.2	2519.1	2425.4	2319.1	2236.8	2172.2	2152.0	2144.4
7.5°	2702.6	2709.0	2640.6	2514.0	2331.7	2110.2	1916.5	1753.2	1626.7	1588.7	1533.0
10°	2735.6	2731.8	2602.6	2367.2	2046.9	1714.0	1414.0	1191.2	1022.8	962.1	957.0
12.5°	2786.2	2765.9	2554.5	2167.2	1707.7	1272.2	901.3	705.1	598.8	563.3	555.7
15°	2849.5	2801.4	2478.6	1933.0	1307.6	821.6	555.7	496.2	482.3	479.8	477.2
17.5°	2924.2	2848.2	2378.6	1645.6	919.0	532.9	464.6	463.3	464.6	462.0	460.8
20°	3025.4	2897.6	2259.6	1305.1	607.6	449.4	443.1	443.1	444.3	443.1	443.1
22.5°	3133.0	2955.8	2112.7	996.2	458.2	426.6	425.3	427.9	430.4	429.1	429.1
25°	3266.0	3031.8	1919.1	682.3	410.1	407.6	408.9	413.9	419.0	420.3	419.0
27.5°	3458.4	3125.4	1711.5	469.6	376.0	378.5	391.2	403.8	411.4	412.7	412.7
30°	3674.8	3229.2	1440.6	381.0	348.1	348.1	363.3	387.4	403.8	406.3	407.6
32.5°	3953.3	3349.5	1140.6	343.1	321.5	319.0	332.9	362.0	392.4	401.3	401.3
35°	4297.6	3491.3	848.1	319.0	302.5	296.2	303.8	327.9	367.1	392.4	395.0
37.5°	4701.5	3625.5	620.3	297.5	284.8	276.0	281.0	300.0	331.7	369.6	379.8
40°	5074.9	3744.5	463.3	279.8	267.1	260.8	264.6	273.4	300.0	335.5	341.8
42.5°	5482.5	3836.9	368.4	260.8	249.4	246.8	246.8	250.6	268.4	288.6	289.9
45°	5888.9	3869.8	308.9	238.0	230.4	232.9	231.7	229.1	236.7	234.2	234.2
47.5°	6178.7	3830.5	255.7	216.5	216.5	220.3	213.9	205.1	201.3	186.1	187.3
50°	6377.5	3687.5	210.1	191.1	201.3	206.3	193.7	179.8	165.8	149.4	145.6
52.5°	6459.8	3433.1	172.2	158.2	178.5	184.8	169.6	153.2	131.7	117.7	113.9
55°	6406.6	3119.1	143.0	129.1	150.6	158.2	143.0	124.1	100.0	84.8	82.3
57.5°	6172.4	2744.4	121.5	102.5	120.3	125.3	115.2	94.9	70.9	55.7	55.7
60°	5767.3	2357.1	98.7	81.0	89.9	97.5	87.3	68.4	48.1	34.2	31.6
62.5°	4945.8	1914.0	79.8	63.3	63.3	69.6	60.8	49.4	30.4	17.7	16.5
65°	3571.0	1312.7	63.3	46.8	45.6	45.6	38.0	32.9	17.7	7.6	5.1
67.5°	1940.6	740.5	50.6	35.4	31.6	30.4	24.1	19.0	7.6	1.3	0.0
70°	763.3	284.8	39.2	24.1	20.3	19.0	12.7	8.9	5.1	0.0	0.0
71°	517.7	196.2	34.2	20.3	16.5	13.9	10.1	7.6	3.8	0.0	0.0
72.5°	296.2	121.5	26.6	15.2	12.7	10.1	7.6	5.1	3.8	0.0	0.0
75°	129.1	62.0	16.5	11.4	8.9	6.3	5.1	3.8	1.3	0.0	0.0
77.5°	65.8	34.2	11.4	8.9	5.1	3.8	2.5	1.3	0.0	0.0	0.0
80°	36.7	17.7	7.6	5.1	3.8	2.5	1.3	1.3	0.0	0.0	0.0
82.5°	20.3	10.1	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.7	6.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.3	2.5	0.0	0.0	0.0	0.0	1.3	1.3	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)