

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: P453981

Luminaire Tested: **GALN-SA5A-740-U-T3-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453981  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-13)  
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-T3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16814 lumens  
Efficiency: N/A  
Efficacy: 109.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3

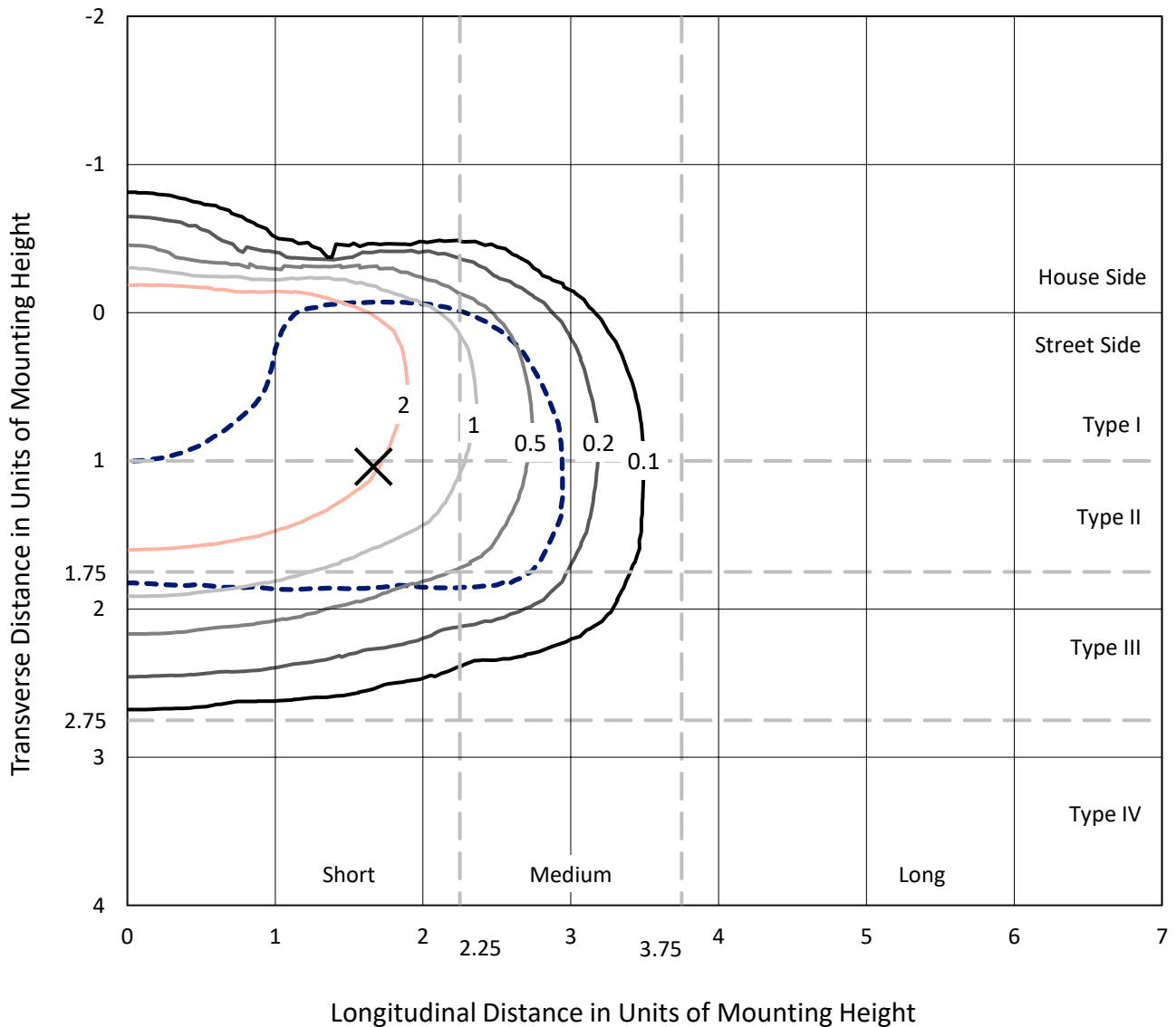
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

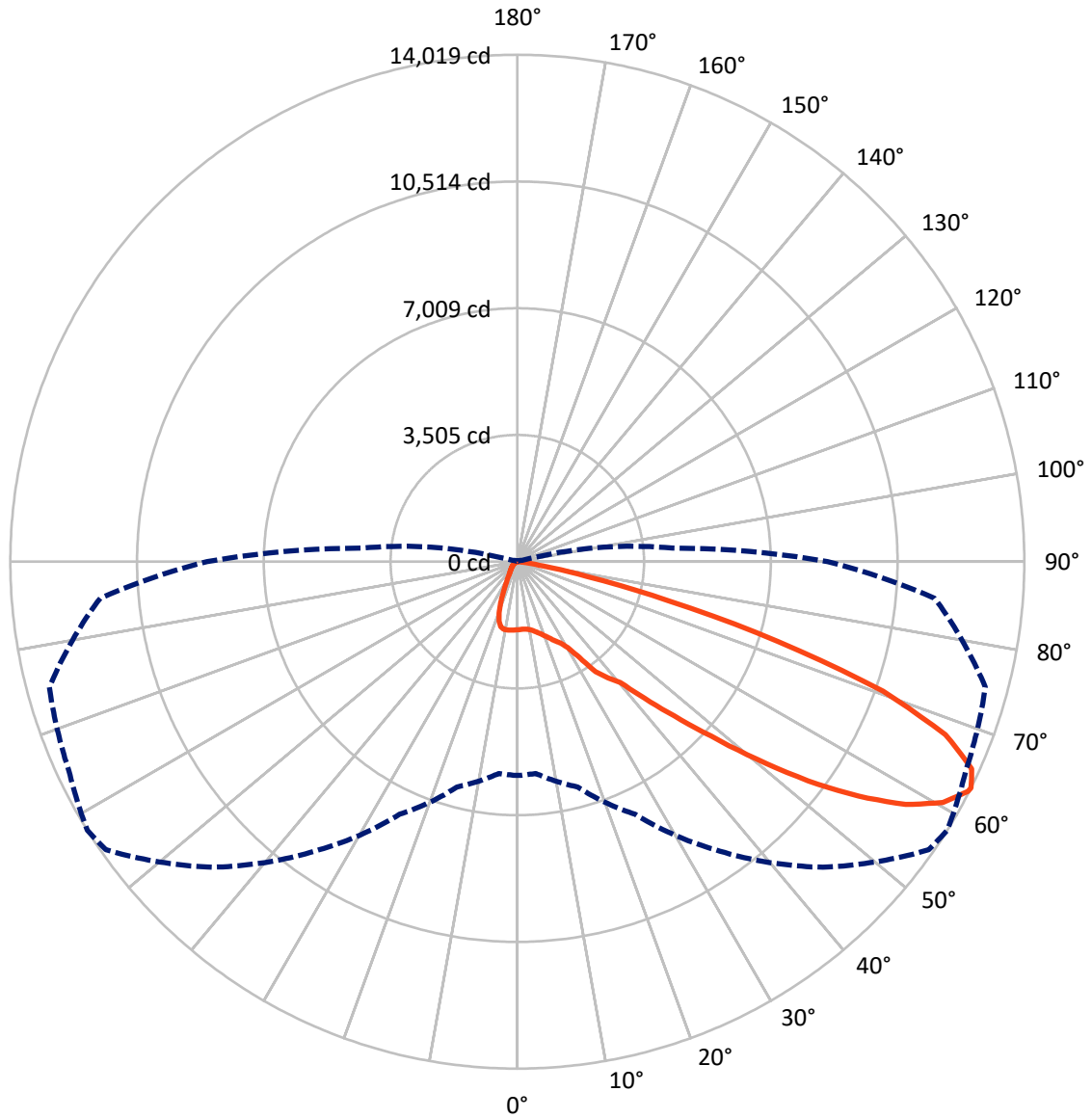
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1741.0	0.0	1741.0
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	15073.0	0.0	15073.0
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	16814.0	0.0	16814.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.2	1.0
10°-20°	480.0	2.9
20°-30°	833.0	5.0
30°-40°	1530.7	9.1
40°-50°	2881.5	17.1
50°-60°	4928.6	29.3
60°-70°	4719.1	28.1
70°-80°	1203.4	7.2
80°-90°	61.5	0.4
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°	16814.0	100.0
0°-180°	16814.0	100.0

**Coefficient of Utilization**



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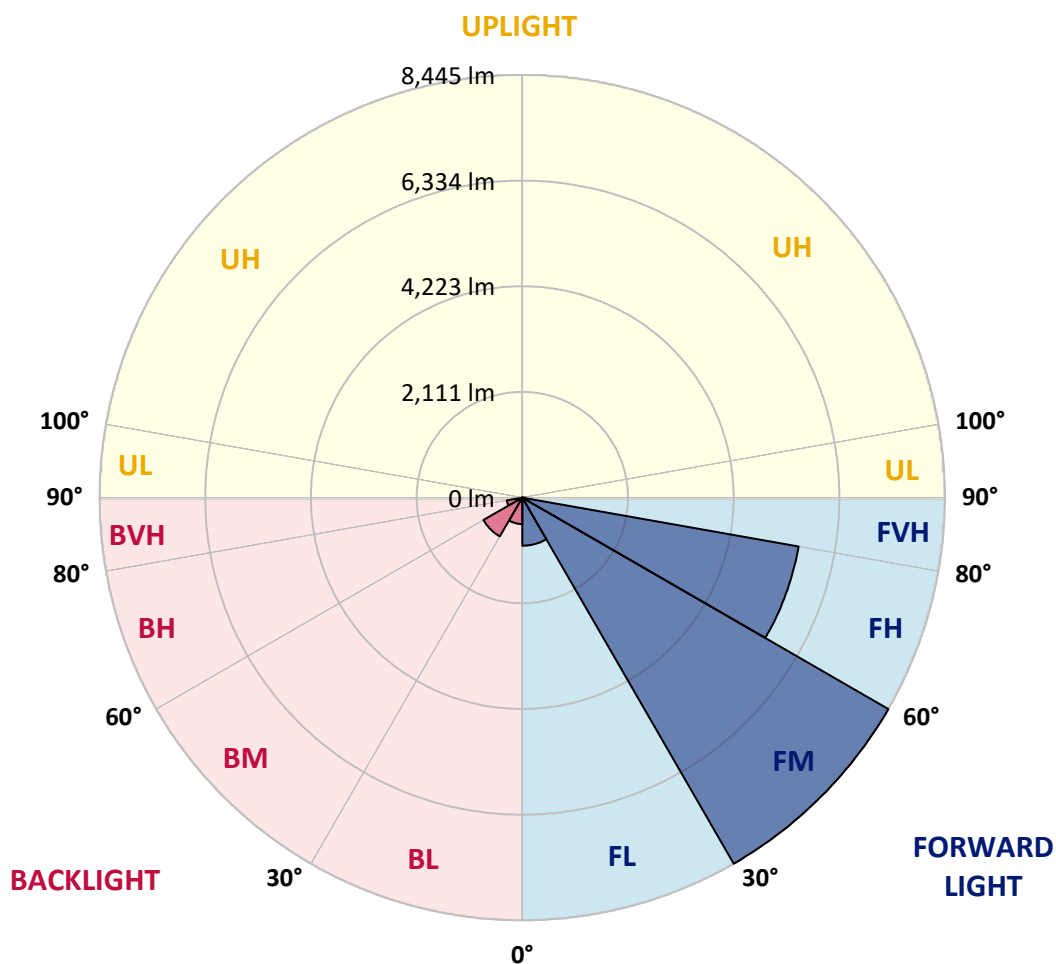
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	961.2	5.7			
FM (30°-60°)	8445.3	50.2			
FH (60°-80°)	5607.4	33.3			G3/7500
FVH (80°-90°)	59.1	0.4			G1/100
BL (0°-30°)	528.0	3.1	B2/1000		
BM (30°-60°)	895.5	5.3	B1/1000		
BH (60°-80°)	315.2	1.9	B1/500		G1/500
BVH (80°-90°)	2.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4
2.5°	1835.6	1841.9	1848.2	1850.7	1859.6	1868.5	1874.8	1873.5	1883.7	1888.7	1888.7
5°	1762.1	1762.1	1778.6	1793.8	1819.1	1844.4	1868.5	1873.5	1892.5	1910.2	1916.6
7.5°	1700.1	1703.9	1716.6	1744.4	1778.6	1822.9	1871.0	1882.4	1915.3	1954.5	1971.0
10°	1671.0	1673.5	1690.0	1719.1	1762.1	1822.9	1890.0	1911.5	1962.1	2024.2	2047.0
12.5°	1664.7	1668.5	1684.9	1717.8	1767.2	1840.6	1931.8	1954.5	2028.0	2107.7	2141.9
15°	1676.1	1678.6	1695.0	1730.5	1784.9	1872.3	1987.5	2019.1	2106.5	2198.9	2243.2
17.5°	1716.6	1714.0	1725.4	1754.5	1815.3	1911.5	2054.6	2092.5	2195.1	2321.7	2350.8
20°	1888.7	1872.3	1862.1	1836.8	1860.9	1967.2	2135.6	2191.3	2317.9	2447.0	2467.2
22.5°	2259.6	2222.9	2150.8	2052.0	1976.1	2043.2	2233.0	2297.6	2460.9	2587.5	2587.5
25°	2731.8	2685.0	2612.8	2397.6	2211.5	2168.5	2343.2	2424.2	2616.6	2744.5	2702.7
27.5°	3323.0	3286.3	3145.8	2895.1	2610.3	2387.5	2471.0	2545.7	2754.6	2909.0	2821.7
30°	3804.0	3786.3	3671.1	3447.0	3133.1	2807.8	2709.0	2758.4	2938.2	3116.6	3026.8
32.5°	4210.4	4210.4	4092.7	3883.8	3590.1	3301.5	3112.8	3148.3	3320.5	3526.8	3359.7
35°	4657.2	4642.1	4547.1	4348.4	4019.2	3764.8	3687.6	3735.7	3891.4	4044.5	3633.1
37.5°	5126.9	5121.8	5023.1	4830.7	4562.3	4242.0	4061.0	4073.7	4153.4	4247.1	3953.4
40°	5637.0	5644.6	5515.5	5396.5	5143.3	4815.5	4468.6	4388.9	4463.6	4728.1	4544.6
42.5°	6239.6	6221.9	6166.2	6004.2	5800.4	5604.1	5187.7	5158.5	5224.4	5507.9	5309.2
45°	6939.7	6965.0	6868.8	6778.9	6642.2	6478.9	6130.8	6080.1	6152.3	6592.8	6310.5
47.5°	7641.0	7616.9	7678.9	7662.5	7735.9	7614.4	7306.8	7203.0	7376.4	7794.1	7378.9
50°	8175.2	8201.8	8330.9	8519.5	8834.7	8903.1	8608.1	8572.7	8649.9	8918.3	8334.7
52.5°	8522.0	8610.6	8813.2	9298.0	9866.4	10308.2	10084.2	10065.2	10033.5	10105.7	9248.7
55°	8748.6	8838.5	9103.1	9817.0	10795.6	11513.4	11524.7	11443.7	11234.9	11183.0	10103.1
57.5°	8609.4	8627.1	9004.3	9958.8	11310.8	12372.9	12745.1	12664.1	12278.0	12081.7	10857.6
60°	7738.4	7775.2	8300.5	9422.1	11086.7	12653.9	13554.0	13517.3	13094.5	12872.9	11445.0
62.5°	6195.3	6301.6	6842.2	8092.9	10044.9	12180.5	13881.9	13985.7	13656.5	13351.4	11629.8
63°	5911.7	5877.6	6448.5	7705.5	9768.9	11946.3	13886.9	14018.6	13681.8	13397.0	11579.2
65°	4376.2	4478.8	4849.7	6076.3	8129.6	10856.4	13574.2	13807.2	13588.2	13195.7	11018.4
67.5°	2457.1	2452.0	2862.2	3976.2	5690.2	8515.7	12274.2	12766.6	12721.0	11841.2	9133.5
70°	1202.6	1221.6	1390.0	2060.9	3300.2	5875.0	10199.4	10731.0	10747.5	9300.6	6315.6
72.5°	544.3	553.2	673.5	1003.9	1696.3	3128.0	7028.3	7535.9	7442.2	5926.9	3487.6
75°	287.4	306.3	370.9	505.1	817.8	1290.0	3823.0	4314.2	4118.0	2707.8	1283.6
77.5°	212.7	219.0	251.9	321.5	438.0	502.6	1649.5	1962.1	1838.1	979.8	425.3
80°	155.7	160.8	187.4	227.9	276.0	255.7	621.6	712.7	639.3	332.9	130.4
82.5°	94.9	96.2	136.7	169.6	173.4	143.0	205.1	220.3	230.4	187.4	70.9
85°	34.2	43.0	92.4	122.8	102.5	72.2	86.1	94.9	103.8	119.0	41.8
87.5°	3.8	5.1	44.3	59.5	29.1	26.6	31.6	35.4	38.0	44.3	20.3
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°	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4	1882.4
2.5°	1893.8	1898.8	1895.1	1888.7	1887.5	1883.7	1876.1	1876.1	1876.1	1878.6	1876.1
5°	1921.6	1925.4	1916.6	1903.9	1890.0	1872.3	1853.3	1841.9	1840.6	1838.1	1831.8
7.5°	1974.8	1979.9	1959.6	1929.2	1891.3	1848.2	1807.7	1769.7	1752.0	1738.1	1738.1
10°	2052.0	2057.1	2016.6	1962.1	1886.2	1798.8	1702.6	1615.3	1546.9	1515.3	1507.7
12.5°	2144.4	2147.0	2079.9	1984.9	1859.6	1691.2	1486.2	1295.0	1162.1	1101.3	1095.0
15°	2245.7	2228.0	2139.4	1993.8	1783.7	1469.7	1115.3	881.1	743.1	702.6	717.8
17.5°	2348.2	2315.3	2184.9	1979.9	1612.8	1115.3	749.4	601.3	558.3	546.9	546.9
20°	2444.5	2398.9	2217.9	1919.1	1316.5	768.4	555.7	520.3	512.7	505.1	506.4
22.5°	2540.7	2471.0	2247.0	1783.7	981.1	549.4	497.5	486.1	476.0	465.9	464.6
25°	2634.3	2538.1	2258.4	1533.0	668.4	472.2	454.5	439.3	419.0	407.6	405.1
27.5°	2731.8	2619.1	2250.8	1216.5	487.4	422.8	405.1	383.6	359.5	339.3	339.3
30°	2919.2	2773.6	2224.2	874.7	410.2	372.2	349.4	315.2	288.6	268.4	267.1
32.5°	3174.9	2974.9	2133.0	615.2	364.6	327.9	293.7	255.7	227.9	212.7	212.7
35°	3402.7	3177.4	1962.1	453.2	327.9	284.8	243.1	206.3	184.8	174.7	170.9
37.5°	3749.6	3473.6	1726.7	368.4	292.4	246.9	203.8	169.6	151.9	144.3	144.3
40°	4269.9	3835.7	1438.1	322.8	258.2	210.1	169.6	143.0	129.1	120.3	120.3
42.5°	4915.5	4278.7	1145.6	289.9	226.6	181.0	141.8	121.5	108.9	102.5	101.3
45°	5728.2	4745.9	882.3	259.5	201.3	154.4	120.3	102.5	89.9	86.1	87.3
47.5°	6576.3	5157.3	683.6	232.9	174.7	130.4	102.5	88.6	79.8	74.7	74.7
50°	7300.4	5440.8	519.0	202.5	154.4	110.1	89.9	79.8	72.2	69.6	68.4
52.5°	7905.5	5523.1	397.5	176.0	135.5	94.9	79.8	72.2	65.8	62.0	62.0
55°	8420.8	5451.0	311.4	148.1	113.9	82.3	70.9	64.6	57.0	53.2	51.9
57.5°	8722.0	5219.3	238.0	122.8	92.4	68.4	62.0	54.4	45.6	39.2	39.2
60°	8874.0	4882.6	182.3	101.3	70.9	54.4	50.6	40.5	31.6	26.6	25.3
62.5°	8691.7	4435.7	138.0	79.8	53.2	40.5	34.2	29.1	20.3	15.2	15.2
63°	8579.0	4306.6	132.9	76.0	49.4	38.0	31.6	26.6	17.7	13.9	12.7
65°	7820.7	3743.3	108.9	60.8	39.2	26.6	21.5	19.0	12.7	6.3	5.1
67.5°	6210.5	2863.5	86.1	45.6	27.8	19.0	12.7	11.4	3.8	0.0	0.0
70°	4199.0	1849.5	67.1	32.9	19.0	11.4	6.3	5.1	1.3	0.0	0.0
72.5°	2190.0	948.2	51.9	24.1	11.4	7.6	3.8	1.3	0.0	0.0	0.0
75°	774.7	322.8	38.0	15.2	7.6	3.8	1.3	0.0	0.0	0.0	0.0
77.5°	234.2	120.3	24.1	11.4	5.1	2.5	0.0	0.0	0.0	0.0	0.0
80°	82.3	44.3	13.9	7.6	3.8	1.3	0.0	0.0	0.0	0.0	0.0
82.5°	40.5	21.5	8.9	6.3	3.8	1.3	0.0	0.0	0.0	0.0	0.0
85°	22.8	13.9	7.6	6.3	3.8	2.5	0.0	0.0	0.0	0.0	0.0
87.5°	16.5	10.1	7.6	6.3	5.1	2.5	1.3	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)