

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: P322059

Luminaire Tested: **GLEON-SA5D-827-U-T2-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P322059  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA5D-827-U-T2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20280 lumens  
Efficiency: N/A  
Efficacy: 63.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

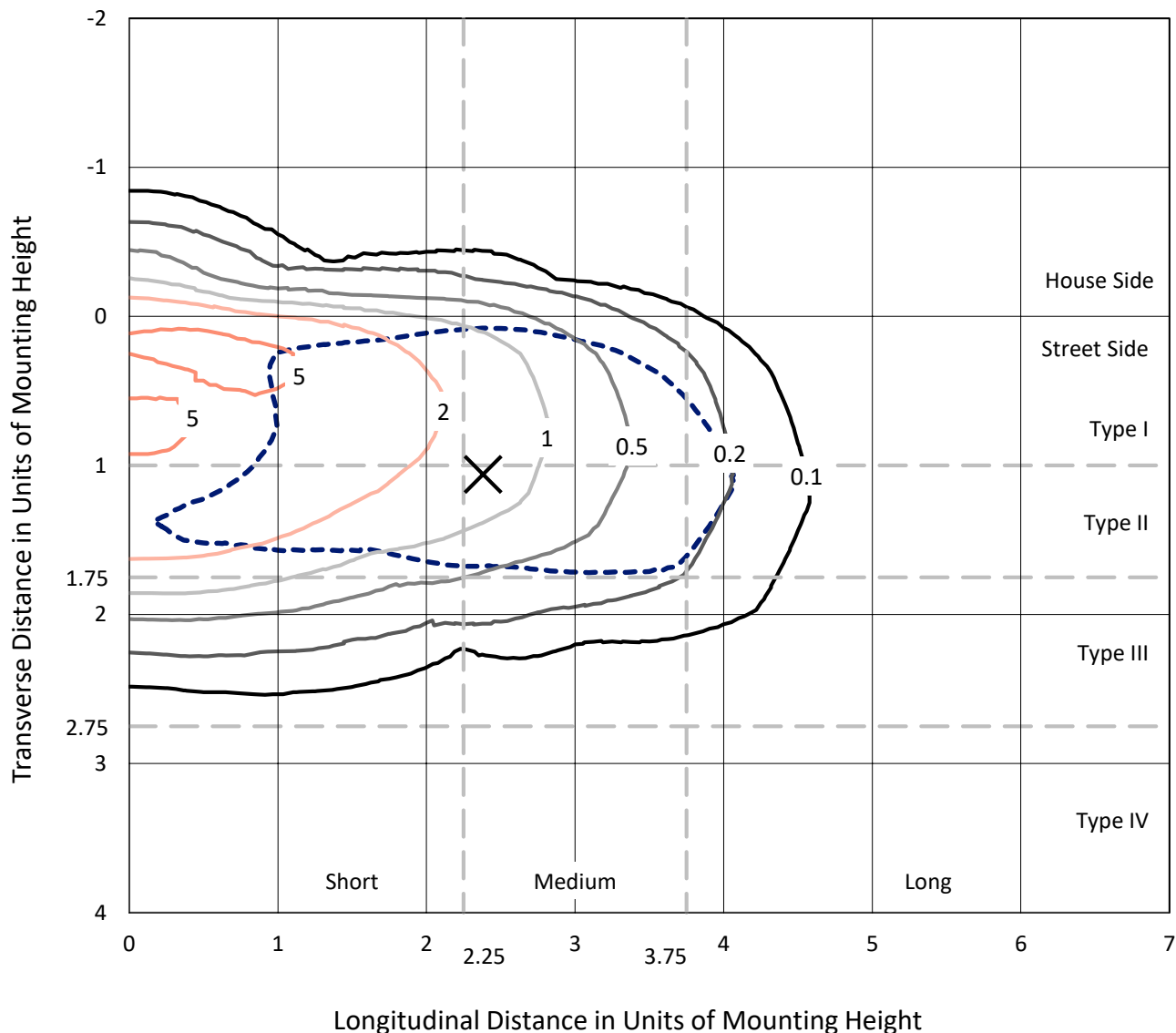
Input Watts (W): 320  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

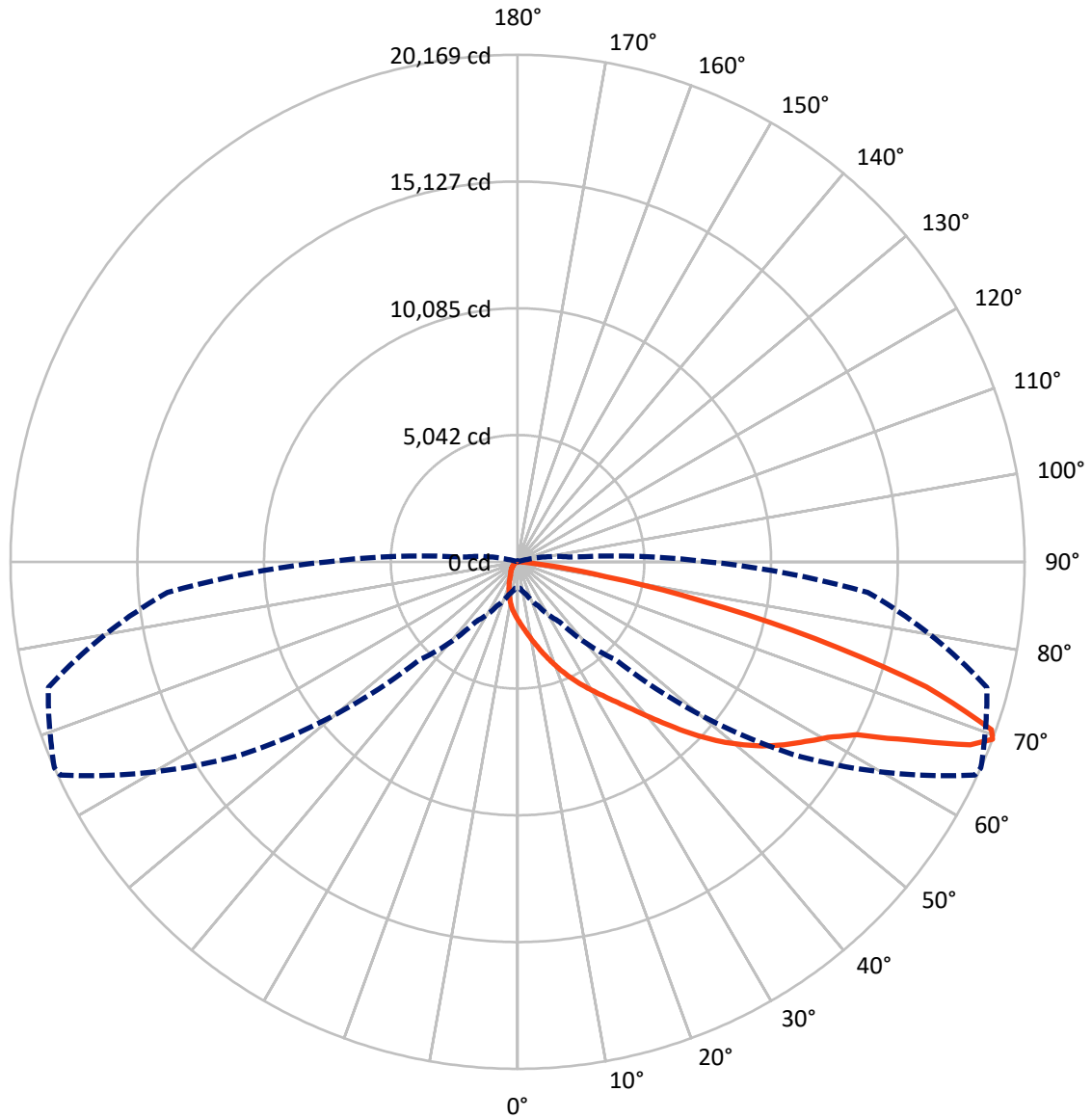
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc  
 Type II - 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
<b>House Side</b>	Lumens	1216.5	0.0	1216.5
	% Fixture	6.0	0.0	6.0
<b>Street Side</b>	Lumens	19063.5	0.0	19063.5
	% Fixture	94.0	0.0	94.0
<b>Total</b>	Lumens	20280.0	0.0	20280.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.1	1.1
10°-20°	664.0	3.3
20°-30°	1156.2	5.7
30°-40°	2028.6	10.0
40°-50°	3395.5	16.7
50°-60°	4991.0	24.6
60°-70°	5124.5	25.3
70°-80°	2529.8	12.5
80°-90°	167.3	0.8
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°	20280.0	100.0
0°-180°	20280.0	100.0

**Coefficient of Utilization**

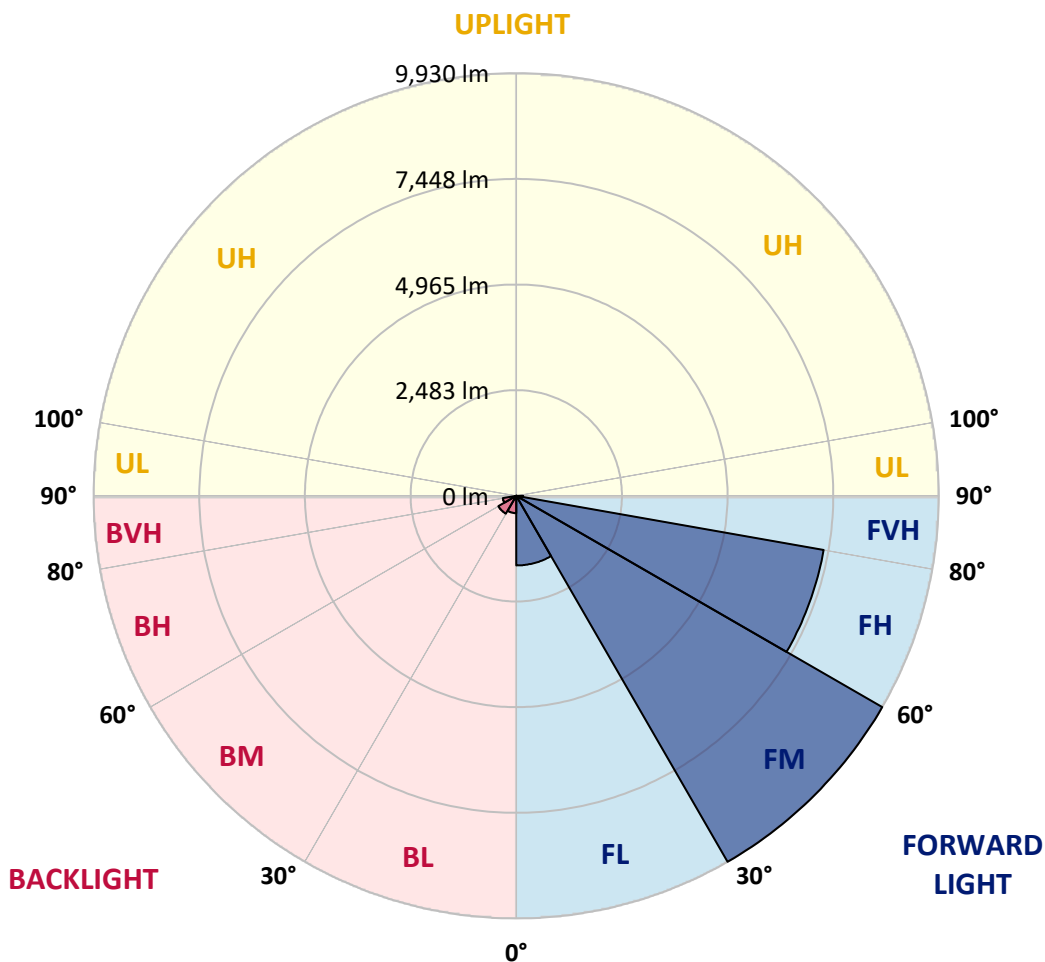


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1636.4	8.1			
FM (30°-60°)	9930.1	49.0			
FH (60°-80°)	7333.8	36.2			G3/7500
FVH (80°-90°)	163.2	0.8			G2/225
BL (0°-30°)	406.9	2.0	B1/500		
BM (30°-60°)	485.0	2.4	B1/1000		
BH (60°-80°)	320.6	1.6	B1/500		G1/500
BVH (80°-90°)	4.0	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-G3**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9
2.5°	2716.3	2704.8	2700.0	2678.8	2642.2	2614.2	2560.3	2497.7	2486.1	2425.4	2351.3
5°	3068.9	3059.3	3052.5	3022.7	2985.1	2914.8	2816.5	2700.0	2677.8	2562.2	2413.9
7.5°	3314.5	3331.9	3331.9	3312.6	3265.4	3212.4	3092.0	2933.1	2905.1	2727.9	2497.7
10°	3458.0	3479.2	3495.6	3512.0	3505.2	3484.0	3370.4	3191.2	3157.5	2922.5	2595.0
12.5°	3471.5	3492.7	3539.0	3607.3	3673.8	3722.0	3650.7	3477.3	3438.8	3147.9	2710.6
15°	3396.4	3418.5	3489.8	3622.8	3783.6	3924.3	3947.4	3794.2	3754.7	3416.6	2855.1
17.5°	3265.4	3279.8	3381.9	3565.9	3818.3	4076.4	4216.1	4134.2	4097.6	3723.9	3015.9
20°	3168.1	3178.7	3268.3	3465.7	3797.1	4171.8	4470.4	4495.5	4456.9	4053.3	3190.3
22.5°	3334.7	3354.0	3356.9	3450.3	3739.3	4219.0	4693.9	4850.9	4822.0	4403.0	3361.7
25°	3790.4	3812.5	3739.3	3681.5	3788.4	4240.2	4885.6	5215.0	5191.9	4779.6	3534.1
27.5°	4392.4	4415.5	4321.1	4148.7	4045.6	4320.1	5056.1	5584.9	5583.9	5178.4	3720.0
30°	4983.8	5006.9	4910.6	4738.2	4501.2	4546.5	5203.4	5972.1	5977.9	5589.7	3917.5
32.5°	5604.1	5633.0	5533.8	5312.3	5064.7	4937.6	5410.5	6361.3	6394.0	6066.5	4140.0
35°	6309.2	6313.1	6173.4	5941.3	5656.2	5460.6	5742.9	6797.6	6875.6	6657.0	4422.2
37.5°	7000.8	7028.8	6914.2	6548.1	6286.1	6064.6	6237.0	7342.8	7453.6	7378.4	4791.2
40°	7513.3	7572.0	7555.7	7160.7	6912.2	6754.3	6850.6	7991.1	8131.7	8218.4	5256.4
42.5°	7835.0	7879.3	7954.5	7716.5	7491.1	7517.1	7574.9	8746.2	8919.6	9175.8	5791.0
45°	8203.9	8225.1	8287.7	8182.7	8030.6	8292.6	8343.6	9596.8	9778.8	10205.6	6384.4
47.5°	8654.7	8704.8	8722.2	8625.8	8556.5	8978.4	9084.3	10370.3	10625.5	11308.5	7012.4
50°	9228.8	9242.3	9272.2	9209.6	9140.2	9567.9	9749.0	11182.3	11414.4	12415.2	7631.8
52.5°	9790.4	9838.6	9942.6	9903.1	9875.2	10069.7	10341.4	11914.3	12173.5	13338.0	8250.2
55°	9952.2	9993.6	10352.9	10598.6	10825.9	10688.1	10907.8	12570.3	12850.6	14162.6	8845.5
57.5°	9305.9	9389.7	10011.9	10651.5	11594.6	11649.5	11686.1	13243.6	13495.0	14794.4	9464.8
60°	7672.2	7688.6	8709.6	9806.8	11467.4	12488.4	12822.7	13967.0	14178.0	15383.0	10206.5
62.5°	4879.8	5046.4	6166.7	7715.6	10122.7	12367.1	14197.2	15061.3	15138.3	16089.0	11269.9
65°	2324.3	2432.2	3239.4	4767.1	7332.2	10813.4	15146.0	17040.7	17075.4	17488.6	12690.7
67.5°	1286.9	1338.9	1723.2	2566.1	4286.4	7647.2	14762.7	19385.3	19418.0	18918.1	13937.2
69°	1006.6	1050.9	1353.4	1934.2	2906.1	5496.3	13359.2	20072.0	20169.3	19327.5	13981.5
70°	854.4	897.7	1165.5	1633.7	2336.8	4246.9	11891.2	19901.6	20004.6	19288.9	13651.1
72.5°	523.0	548.1	776.4	1150.1	1566.2	2136.5	7333.2	16830.7	17005.1	17693.8	11732.3
75°	352.5	366.0	485.5	793.7	1120.3	1100.0	3809.6	11863.3	12240.9	13763.8	8665.3
77.5°	252.4	264.9	325.6	513.4	785.0	726.3	1725.2	7372.7	7453.6	8255.0	4725.7
80°	143.5	155.1	230.2	305.3	532.7	484.5	685.8	3521.6	3562.1	3539.9	1577.8
82.5°	75.1	84.8	126.2	201.3	342.0	316.9	285.1	1179.0	1184.8	985.4	345.8
85°	14.4	17.3	62.6	137.7	176.3	137.7	116.6	276.5	282.2	249.5	85.7
87.5°	0.0	1.0	25.0	30.8	34.7	35.6	37.6	53.9	57.8	78.0	23.1
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°	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9	2307.9
2.5°	2318.5	2283.8	2217.4	2140.3	2080.6	2021.8	1975.6	1927.4	1910.1	1901.4	1900.5
5°	2341.6	2268.4	2127.8	1983.3	1864.8	1753.1	1673.2	1597.1	1561.4	1545.0	1538.3
7.5°	2380.2	2262.7	2036.3	1815.7	1645.2	1505.5	1394.8	1311.9	1270.5	1253.2	1246.4
10°	2425.4	2255.0	1929.4	1638.5	1420.8	1276.3	1166.5	1084.6	1039.3	1020.1	1010.4
12.5°	2478.4	2241.5	1806.1	1459.3	1229.1	1084.6	951.7	850.5	798.5	776.4	765.8
15°	2543.9	2228.0	1677.0	1290.7	1060.5	884.3	738.8	670.4	659.8	656.0	656.9
17.5°	2608.5	2206.8	1536.4	1124.1	883.3	690.6	616.5	612.6	614.5	614.5	614.5
20°	2666.3	2158.6	1383.2	981.5	714.7	582.8	567.3	560.6	555.8	551.9	547.1
22.5°	2711.5	2094.1	1235.8	839.9	583.7	533.6	509.6	488.4	471.0	459.5	453.7
25°	2742.4	2008.4	1101.0	704.1	525.0	485.5	442.1	406.5	379.5	363.1	356.4
27.5°	2765.5	1915.9	980.6	589.5	484.5	429.6	372.8	330.4	302.5	288.0	282.2
30°	2781.8	1810.9	874.6	518.2	439.2	370.8	310.2	268.7	248.5	240.8	237.0
32.5°	2797.3	1694.3	774.4	484.5	396.9	316.9	260.1	228.3	215.8	206.1	203.2
35°	2835.8	1586.5	679.1	448.9	353.5	270.7	223.5	200.4	187.8	182.1	180.1
37.5°	2927.3	1506.5	587.6	412.3	310.2	234.1	195.5	179.2	167.6	161.8	159.9
40°	3074.7	1466.1	510.5	372.8	267.8	206.1	177.2	161.8	149.3	140.6	138.7
42.5°	3291.4	1471.8	456.6	333.3	234.1	184.0	159.9	141.6	128.1	120.4	118.5
45°	3554.4	1514.2	419.0	294.8	206.1	166.6	140.6	121.4	108.8	102.1	100.2
47.5°	3839.5	1582.6	388.2	260.1	184.0	150.3	121.4	101.1	90.5	84.8	83.8
50°	4140.0	1649.1	356.4	226.4	164.7	133.9	102.1	83.8	75.1	70.3	68.4
52.5°	4444.4	1726.1	327.5	195.5	148.3	114.6	84.8	68.4	61.6	57.8	55.9
55°	4771.9	1783.9	299.6	171.5	132.0	97.3	70.3	56.8	51.1	46.2	45.3
57.5°	5157.2	1873.5	270.7	148.3	112.7	80.9	57.8	45.3	40.5	35.6	34.7
60°	5677.4	1978.5	239.8	131.0	92.5	66.5	47.2	36.6	30.8	27.0	26.0
62.5°	6363.2	2095.1	201.3	114.6	75.1	53.9	37.6	28.9	22.2	17.3	17.3
65°	7233.0	2284.8	164.7	96.3	61.6	44.3	28.9	21.2	12.5	7.7	7.7
67.5°	7740.6	2317.6	132.9	79.0	50.1	37.6	24.1	14.4	3.9	1.0	0.0
69°	7577.8	2127.8	112.7	67.4	43.3	35.6	22.2	10.6	1.9	0.0	0.0
70°	7271.5	1945.7	99.2	59.7	39.5	33.7	21.2	7.7	1.9	0.0	0.0
72.5°	6008.7	1385.1	75.1	44.3	28.9	29.9	19.3	4.8	1.9	0.0	0.0
75°	4377.0	841.9	53.9	30.8	18.3	22.2	13.5	1.9	1.0	0.0	0.0
77.5°	2435.1	396.9	33.7	17.3	11.6	13.5	6.7	0.0	0.0	0.0	0.0
80°	790.8	107.9	15.4	9.6	6.7	7.7	2.9	0.0	0.0	0.0	0.0
82.5°	146.4	30.8	8.7	4.8	1.9	1.9	0.0	0.0	0.0	0.0	0.0
85°	31.8	12.5	4.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.6	3.9	1.0	0.0	0.0	0.0	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)