

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: P191232

Luminaire Tested: **GLEON-AF-04-LED-E1-SL4-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191232  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24294)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-04-LED-E1-SL4-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 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: 15378 lumens  
Efficiency: N/A  
Efficacy: 119.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G3

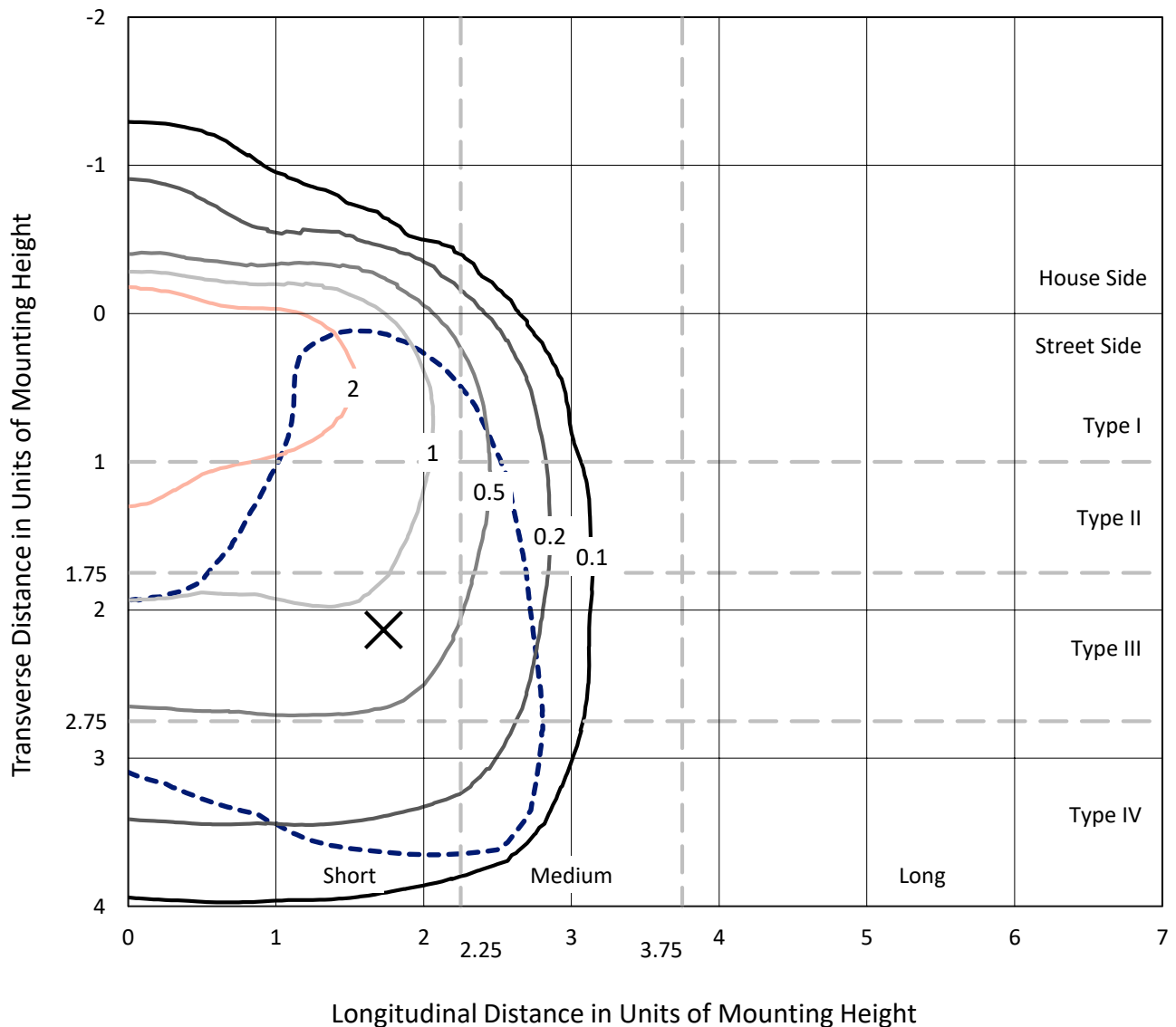
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

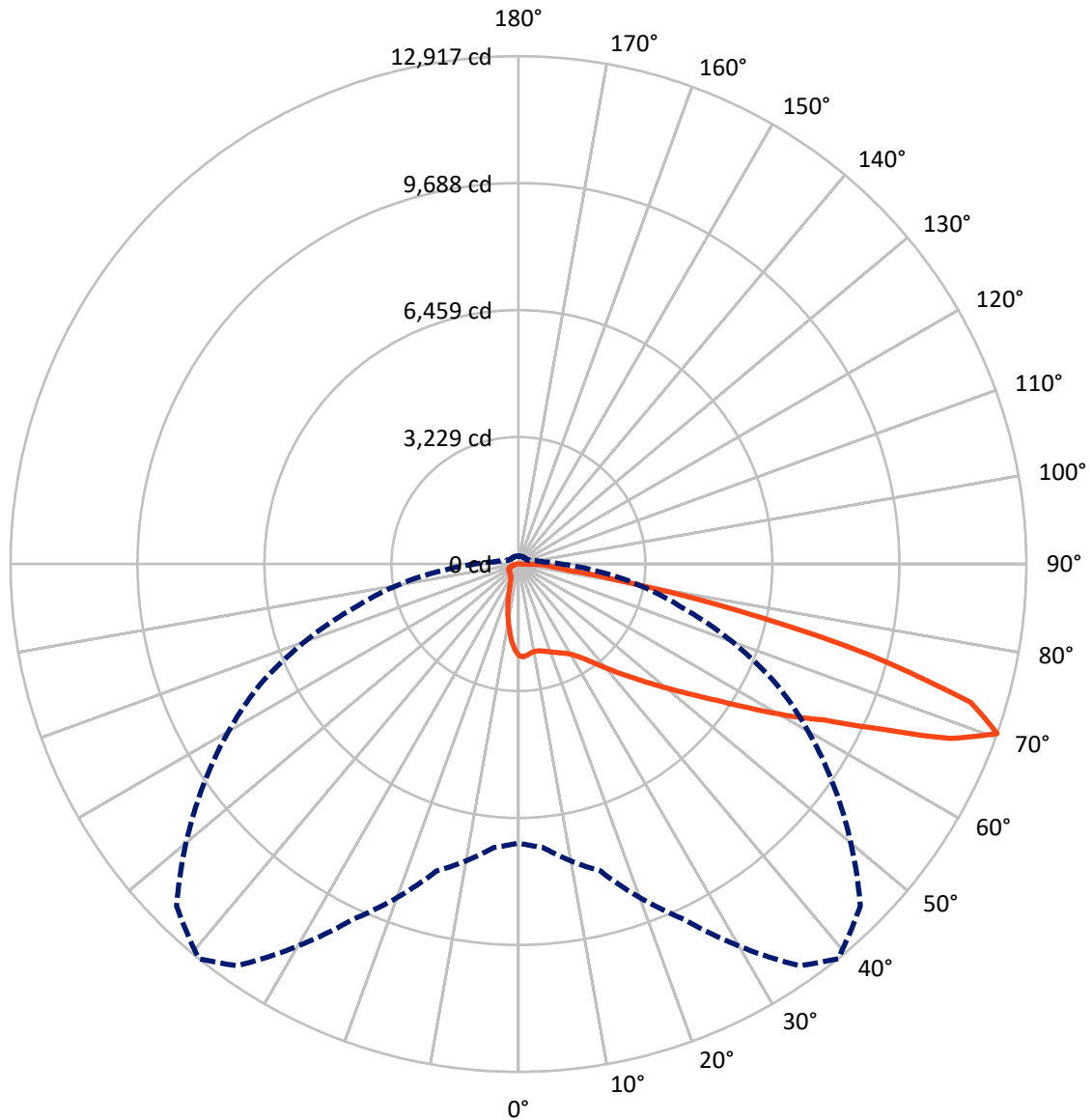
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1749.0	0.0	1749.0
	% Fixture	11.4	0.0	11.4
<b>Street Side</b>	Lumens	13629.0	0.0	13629.0
	% Fixture	88.6	0.0	88.6
<b>Total</b>	Lumens	15378.0	0.0	15378.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.4	1.3
10°-20°	500.8	3.3
20°-30°	779.8	5.1
30°-40°	1214.8	7.9
40°-50°	2039.4	13.3
50°-60°	3239.7	21.1
60°-70°	4321.4	28.1
70°-80°	2609.6	17.0
80°-90°	472.3	3.1
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°	15378.0	100.0
0°-180°	15378.0	100.0



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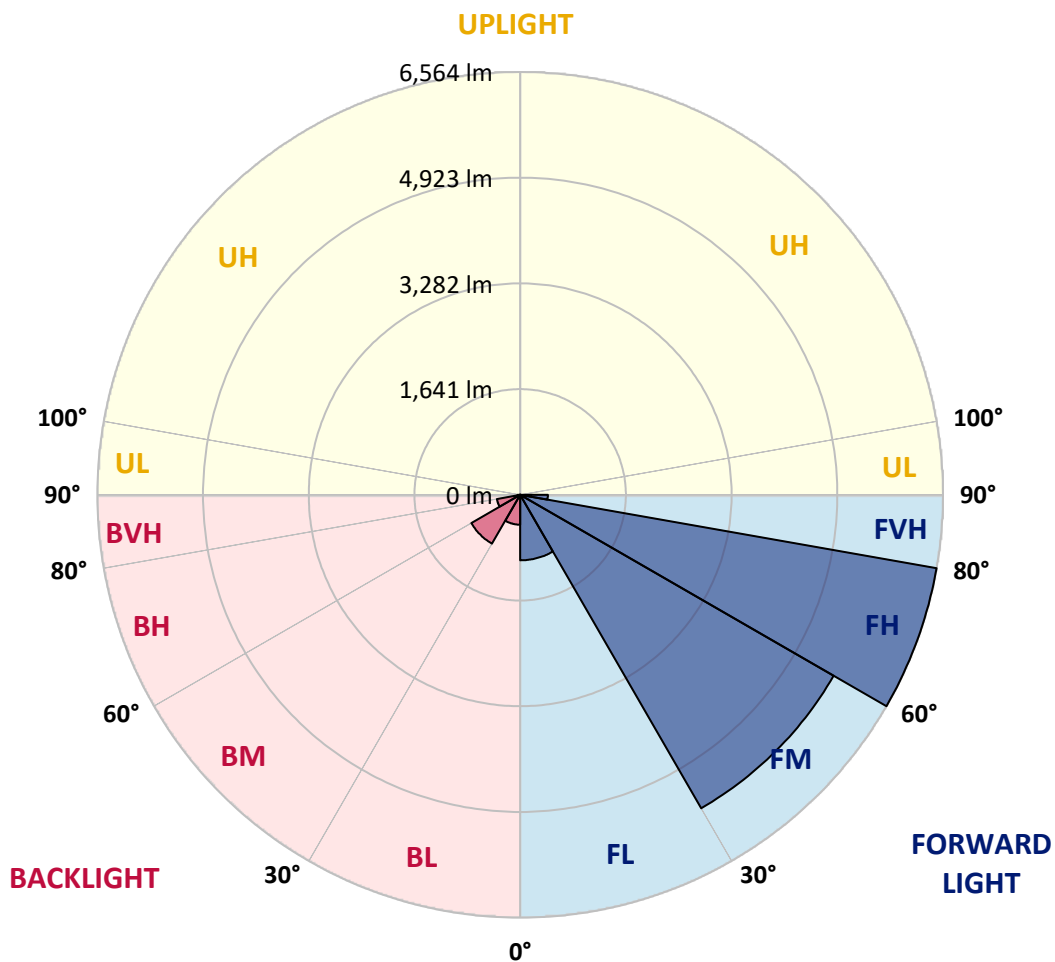
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1017.0	6.6			
FM	(30°-60°)	5618.5	36.5			
FH	(60°-80°)	6563.8	42.7			G3/7500
FVH	(80°-90°)	429.7	2.8			G3/500
BL	(0°-30°)	464.0	3.0	B1/500		
BM	(30°-60°)	875.3	5.7	B1/1000		
BH	(60°-80°)	367.2	2.4	B1/500		G1/500
BVH	(80°-90°)	42.6	0.3			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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6
2.5°	2380.0	2379.2	2372.9	2368.2	2364.3	2362.8	2365.9	2354.2	2344.0	2331.5	2318.2
5°	2362.0	2361.2	2351.0	2341.6	2332.2	2329.2	2328.3	2307.3	2294.8	2276.0	2251.0
7.5°	2342.5	2338.6	2325.3	2309.6	2293.1	2285.4	2277.5	2250.2	2236.1	2217.3	2188.4
10°	2322.1	2317.4	2304.9	2289.3	2273.6	2261.9	2248.7	2222.1	2207.2	2193.1	2159.4
12.5°	2301.0	2297.1	2294.0	2286.9	2276.0	2265.8	2255.6	2233.0	2217.3	2200.9	2161.8
15°	2297.9	2296.3	2303.4	2308.1	2301.7	2295.5	2284.6	2265.0	2248.7	2232.2	2181.3
17.5°	2322.9	2322.1	2340.1	2352.6	2349.5	2338.6	2323.6	2301.7	2288.4	2274.4	2211.1
20°	2377.6	2381.5	2403.4	2419.9	2404.2	2388.6	2364.3	2333.9	2326.8	2320.6	2241.6
22.5°	2480.9	2484.7	2500.4	2506.6	2465.9	2443.3	2409.7	2370.6	2365.9	2370.6	2278.3
25°	2641.9	2638.0	2635.6	2612.2	2537.9	2502.8	2459.7	2419.1	2421.4	2442.5	2330.0
27.5°	2855.4	2834.2	2801.4	2731.0	2612.9	2573.8	2521.5	2483.9	2498.8	2539.5	2407.3
30°	3076.6	3053.1	2977.3	2862.4	2711.4	2668.5	2609.9	2567.6	2606.7	2670.8	2510.5
32.5°	3281.4	3278.4	3167.3	3019.5	2847.5	2809.9	2751.3	2703.7	2767.0	2864.7	2665.3
35°	3505.0	3512.1	3379.2	3201.7	3031.2	2992.1	2950.0	2914.0	2998.4	3132.9	2889.7
37.5°	3744.3	3758.4	3601.2	3401.1	3240.8	3224.3	3199.4	3183.7	3314.3	3500.3	3203.3
40°	4064.1	4050.0	3831.9	3626.3	3498.0	3497.3	3489.4	3508.2	3725.6	3980.4	3605.9
42.5°	4406.6	4365.1	4076.6	3867.9	3780.3	3806.8	3822.5	3899.1	4220.5	4563.7	4096.9
45°	4775.5	4682.6	4330.7	4123.5	4093.7	4150.1	4203.3	4369.8	4803.0	5227.5	4634.9
47.5°	5070.4	4980.4	4593.4	4391.7	4456.6	4541.8	4644.2	4907.7	5455.0	5913.2	5165.7
50°	5302.6	5244.0	4858.4	4704.4	4856.2	4987.5	5154.8	5516.8	6133.6	6580.8	5657.5
52.5°	5527.7	5483.9	5125.8	5024.9	5325.2	5506.6	5734.2	6170.4	6829.5	7237.7	6071.1
55°	5731.0	5699.8	5413.6	5424.5	5877.3	6113.4	6399.5	6914.7	7587.9	7823.2	6421.4
57.5°	5960.1	5920.2	5741.9	5925.6	6586.4	6892.8	7265.0	7751.3	8299.4	8344.0	6688.0
60°	6190.7	6156.3	6106.3	6504.2	7487.1	7809.2	8161.8	8562.1	9021.1	8748.2	6672.4
62.5°	6390.9	6394.8	6483.2	7111.8	8369.0	8741.9	9172.0	9567.6	9673.9	8818.6	6179.0
65°	6730.2	6792.0	7055.5	7971.8	9610.6	10109.4	10637.2	10573.8	9854.5	8161.0	5121.2
67.5°	7133.6	7242.3	7776.4	9118.0	11179.7	11842.0	12046.1	10801.3	9131.3	6634.0	3650.5
70°	7093.0	7242.3	8087.6	9972.5	12472.9	12917.0	12297.8	9775.5	7251.0	4333.8	1939.0
72.5°	6298.6	6512.1	7453.4	9580.9	12065.6	12026.5	10676.2	7287.7	4308.1	1740.4	757.6
75°	4800.6	5016.3	5826.4	7569.1	9536.3	9207.9	7575.4	4025.8	1634.9	691.2	477.7
77.5°	2761.6	2928.8	3554.3	4641.8	6050.0	5713.0	4216.5	1790.5	796.0	481.6	373.0
80°	1541.8	1634.9	2014.8	2354.9	2964.8	2717.8	1886.6	1112.6	594.2	349.4	287.8
82.5°	1218.9	1301.8	1629.4	1485.5	1354.2	1249.4	1083.6	990.6	474.5	220.4	172.0
85°	1064.9	1143.9	1379.2	1169.6	925.0	848.3	880.4	975.0	369.1	132.9	147.0
87.5°	986.7	1092.2	1229.1	901.5	720.1	638.0	812.3	1068.8	118.9	82.9	59.4
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°	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6	2334.6
2.5°	2306.4	2294.0	2273.6	2255.6	2227.5	2212.6	2196.3	2184.5	2175.1	2167.3	2179.8
5°	2235.4	2211.8	2168.9	2122.7	2068.0	2025.0	1989.0	1955.4	1931.9	1916.3	1927.2
7.5°	2168.0	2129.8	2062.6	1978.9	1885.1	1805.3	1739.6	1681.7	1641.9	1616.1	1626.3
10°	2129.8	2082.1	1978.1	1846.7	1708.3	1584.0	1480.8	1391.7	1329.9	1294.7	1300.3
12.5°	2120.4	2058.6	1914.8	1734.1	1545.0	1372.2	1226.7	1103.2	1016.4	971.1	972.6
15°	2127.4	2048.5	1855.3	1626.3	1387.0	1168.8	987.5	837.4	736.5	684.9	684.1
17.5°	2139.2	2040.7	1792.8	1509.8	1226.7	973.4	770.9	623.9	534.8	493.4	490.2
20°	2151.7	2028.1	1722.4	1383.8	1060.2	792.1	603.6	488.7	432.4	409.7	408.2
22.5°	2169.7	2017.2	1649.7	1251.0	896.8	645.1	496.4	419.1	389.3	377.7	376.0
25°	2198.6	2011.7	1572.3	1112.6	749.8	539.5	432.4	384.6	367.4	359.7	358.9
27.5°	2247.0	2019.5	1499.6	978.1	630.1	468.3	396.4	367.4	355.0	347.9	347.2
30°	2309.6	2043.8	1423.0	850.7	537.2	419.8	374.5	355.8	345.6	338.5	338.5
32.5°	2413.6	2084.5	1342.4	740.4	470.7	386.3	358.1	345.6	337.0	331.5	330.7
35°	2566.8	2161.1	1267.4	649.0	423.0	362.0	344.0	334.6	328.4	325.3	325.3
37.5°	2789.7	2282.2	1200.9	583.3	394.0	345.6	330.7	323.7	319.8	319.8	319.8
40°	3089.1	2449.6	1146.9	539.5	377.7	333.9	320.6	315.1	312.7	313.5	313.5
42.5°	3458.9	2666.9	1111.0	509.0	369.8	326.8	313.5	308.8	306.5	305.7	306.5
45°	3880.4	2914.0	1107.1	486.3	362.0	322.1	308.8	304.1	299.4	296.3	296.3
47.5°	4290.1	3164.9	1139.2	478.5	353.4	316.6	304.9	300.2	293.2	286.1	286.1
50°	4652.1	3378.4	1182.1	481.6	350.3	308.8	298.7	296.3	285.4	277.5	276.8
52.5°	4939.7	3542.6	1217.3	491.0	353.4	303.4	290.8	291.6	279.9	271.3	270.6
55°	5170.4	3650.5	1208.0	500.4	360.4	300.2	283.8	285.4	276.0	267.4	267.4
57.5°	5271.3	3610.6	1104.0	492.6	365.9	301.1	278.3	284.6	276.8	268.9	268.9
60°	5054.7	3256.5	909.3	458.2	358.9	298.7	276.0	287.8	286.9	279.2	278.3
62.5°	4399.5	2622.3	705.2	407.3	334.6	286.9	269.8	286.9	295.5	293.2	292.5
65°	3390.9	1867.8	538.7	352.6	301.8	267.4	253.3	268.9	280.7	283.8	283.1
67.5°	2200.9	1144.7	415.2	301.1	265.0	244.7	232.2	239.3	241.6	241.6	240.0
70°	1082.1	616.1	330.7	253.3	227.5	220.4	213.5	209.5	205.6	202.5	202.5
72.5°	534.0	402.6	272.1	214.2	196.2	193.1	191.6	186.9	183.7	179.8	178.3
75°	394.9	327.5	231.4	180.7	168.9	165.7	168.9	165.0	164.2	161.0	159.5
77.5°	324.5	279.2	199.4	154.8	144.6	139.1	143.8	144.6	145.5	140.8	139.1
80°	263.5	236.1	166.5	128.2	118.9	115.0	118.0	124.3	125.9	118.9	115.7
82.5°	190.0	193.1	134.5	100.0	92.3	89.1	95.3	103.2	104.8	94.6	92.3
85°	159.5	161.0	103.2	71.2	63.3	58.6	68.8	76.6	82.1	71.9	69.6
87.5°	66.5	94.6	59.4	39.9	35.2	30.5	36.7	40.6	49.3	45.3	44.6
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)