

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: STREETWORKS

Report Number: P510024

Luminaire Tested: **VERD-M-CA4-190-727-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510024  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-190-727-U-T4-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2700K, 870mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21055 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G5

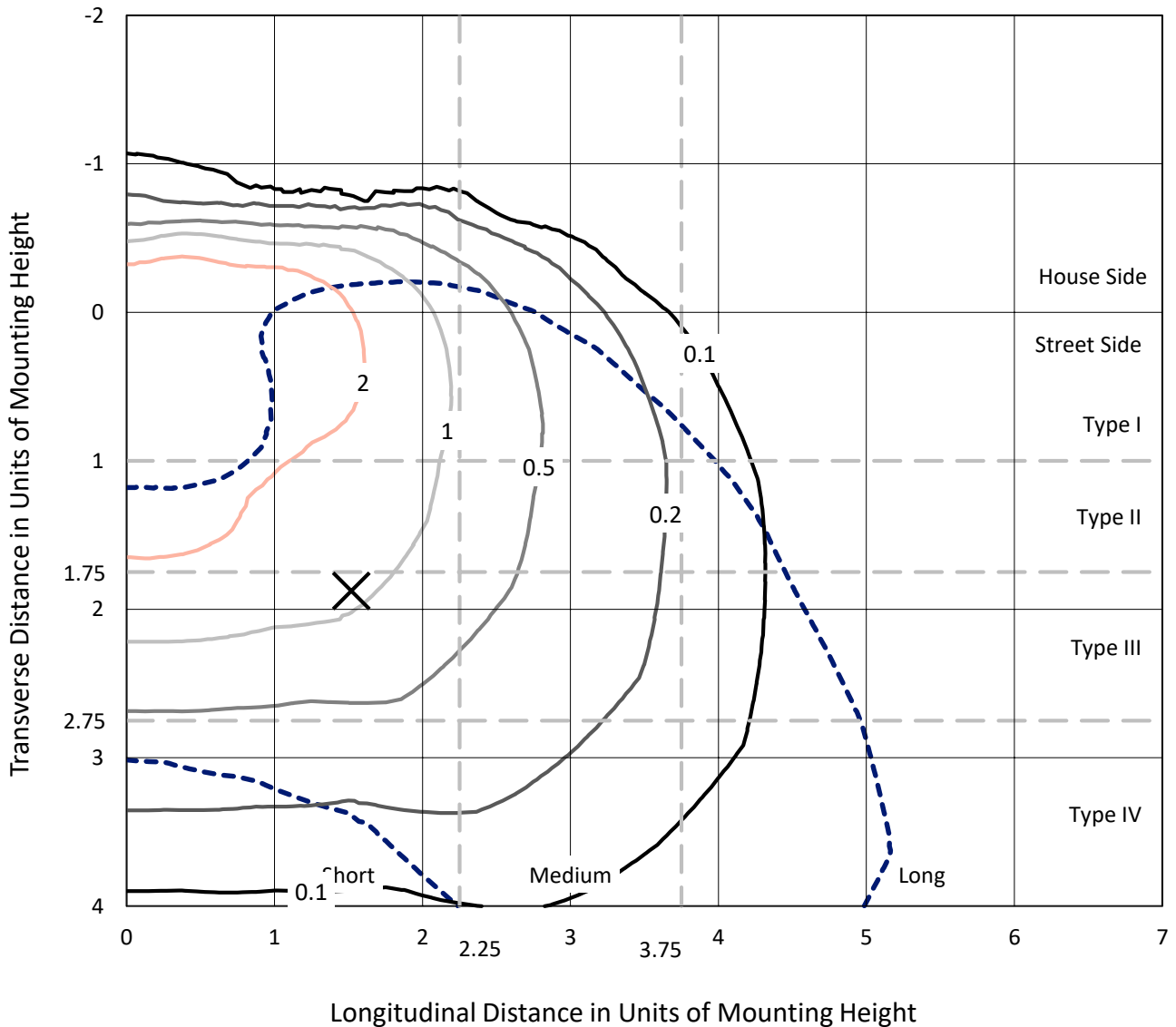
Input Watts (W): 193.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

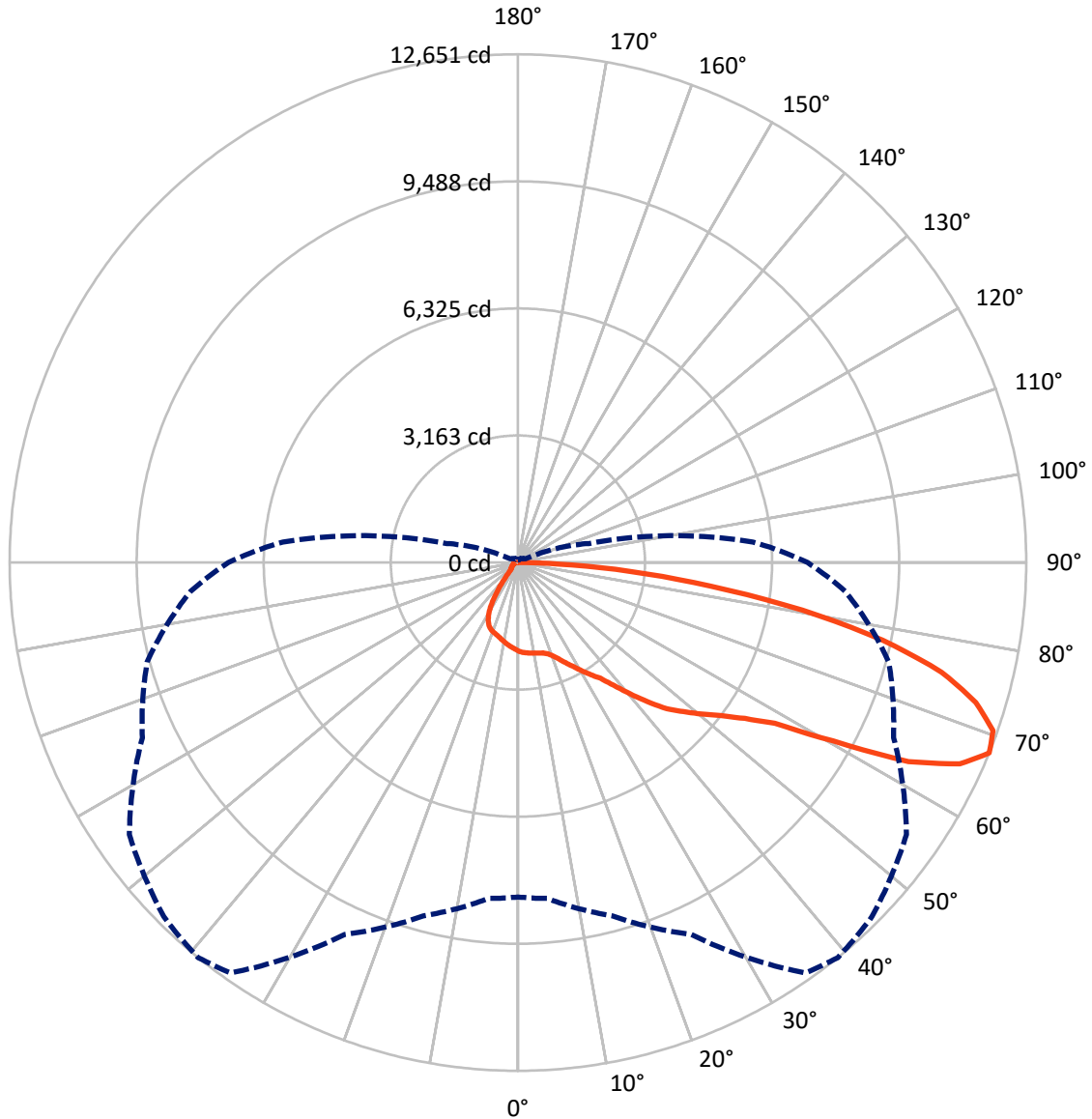
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3380.9	0.0	3380.9
	% Fixture	16.1	0.0	16.1
<b>Street Side</b>	Lumens	17674.1	0.0	17674.1
	% Fixture	83.9	0.0	83.9
<b>Total</b>	Lumens	21055.0	0.0	21055.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.1	1.0
10°-20°	619.5	2.9
20°-30°	1097.5	5.2
30°-40°	1757.9	8.3
40°-50°	2820.0	13.4
50°-60°	4122.0	19.6
60°-70°	5492.7	26.1
70°-80°	4121.8	19.6
80°-90°	815.5	3.9
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°	21055.0	100.0
0°-180°	21055.0	100.0

**Coefficient of Utilization**



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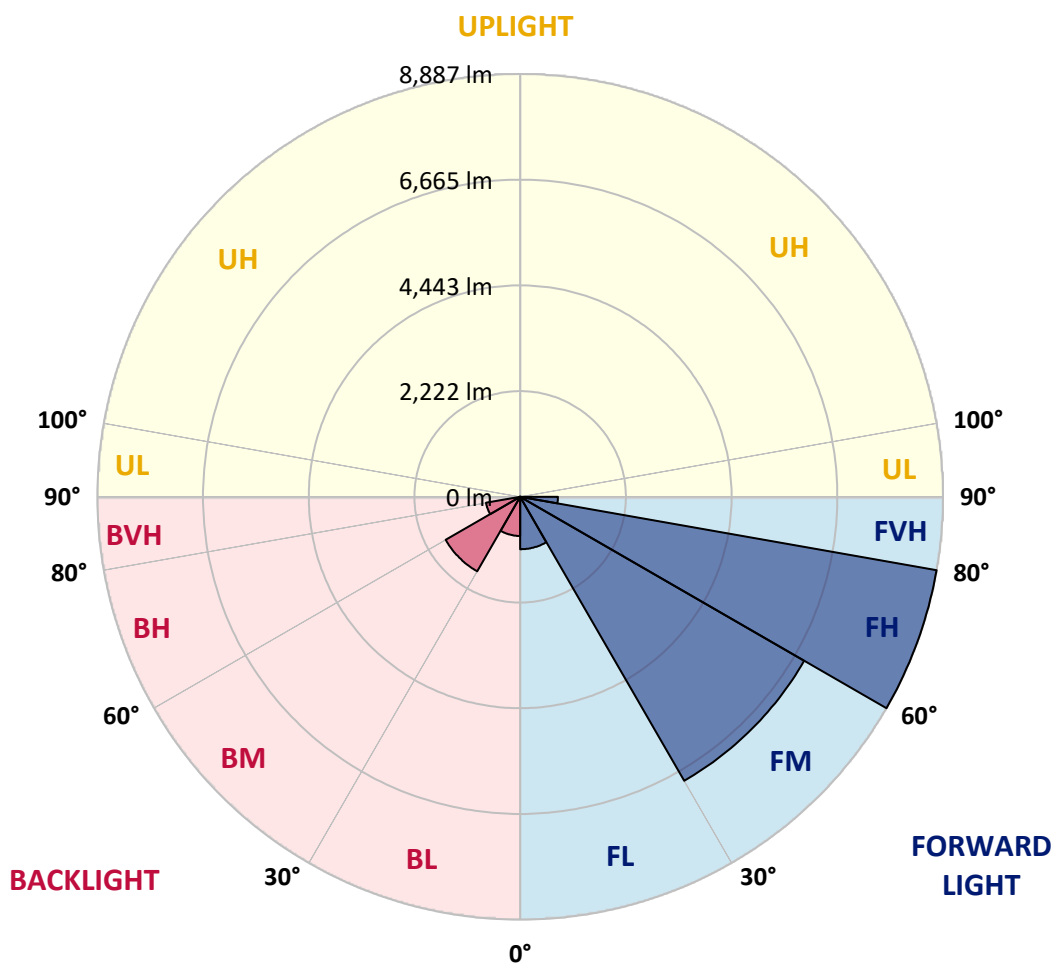
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1101.8	5.2			
FM	(30°-60°)	6891.5	32.7			
FH	(60°-80°)	8886.6	42.2			G4/12000
FVH	(80°-90°)	794.2	3.8			G5
BL	(0°-30°)	823.3	3.9	B2/1000		
BM	(30°-60°)	1808.3	8.6	B2/2500		
BH	(60°-80°)	728.0	3.5	B2/1000		G2/1000
BVH	(80°-90°)	21.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7
2.5°	2206.8	2236.4	2236.4	2228.0	2233.2	2237.5	2205.7	2214.2	2211.0	2210.0	2216.3
5°	2223.7	2256.5	2254.4	2243.8	2248.1	2256.5	2226.9	2239.6	2235.4	2224.8	2226.9
7.5°	2223.7	2251.2	2257.6	2245.9	2266.0	2276.6	2244.9	2256.5	2261.8	2254.4	2247.0
10°	2215.3	2239.6	2248.1	2245.9	2272.4	2289.3	2258.6	2291.4	2295.7	2295.7	2284.0
12.5°	2212.1	2239.6	2251.2	2260.8	2291.4	2309.4	2291.4	2323.2	2344.3	2343.3	2335.9
15°	2214.2	2244.9	2262.9	2278.7	2311.5	2333.7	2326.3	2375.0	2400.4	2407.8	2407.8
17.5°	2267.1	2304.1	2312.6	2329.5	2351.7	2385.6	2376.1	2438.5	2478.7	2491.4	2509.4
20°	2415.2	2443.8	2454.3	2445.9	2455.4	2476.6	2457.5	2517.8	2578.1	2612.0	2641.6
22.5°	2604.6	2625.7	2616.2	2607.7	2602.5	2607.7	2584.5	2624.7	2692.4	2741.0	2791.8
25°	2748.4	2795.0	2787.6	2764.3	2756.9	2763.3	2733.6	2783.4	2845.8	2896.6	2972.7
27.5°	2923.0	2951.6	2931.5	2923.0	2928.3	2927.2	2909.3	2956.9	3014.0	3077.5	3189.6
30°	3112.4	3136.7	3116.6	3108.1	3117.7	3124.0	3103.9	3187.5	3247.8	3316.5	3461.5
32.5°	3423.4	3481.6	3426.6	3316.5	3318.7	3328.2	3330.3	3442.4	3552.5	3606.4	3797.9
35°	3866.7	3913.2	3840.2	3706.9	3540.8	3534.5	3551.4	3718.6	3939.7	4185.1	4409.4
37.5°	4280.3	4348.0	4282.4	4126.9	3924.8	3876.2	3788.4	3987.3	4335.3	4863.2	5142.5
40°	4776.5	4827.2	4697.1	4561.7	4359.6	4290.9	4150.2	4277.1	4754.2	5571.0	5763.5
42.5°	5175.3	5206.0	5098.1	4956.3	4780.7	4728.9	4583.9	4595.6	5201.7	6190.9	6314.7
45°	5544.5	5577.3	5488.4	5367.8	5256.8	5194.3	5088.5	5145.7	5726.5	6844.7	6769.6
47.5°	5824.8	5857.6	5786.8	5701.1	5585.8	5543.4	5545.6	5750.8	6368.6	7367.3	7177.9
50°	6284.0	6271.3	6086.2	5993.1	5903.1	5925.4	5948.6	6240.6	7016.1	7815.8	7555.6
52.5°	7084.8	7022.4	6640.5	6397.2	6286.1	6324.2	6362.3	6750.5	7751.3	8225.2	7845.5
55°	7990.4	7926.9	7602.1	7081.6	6787.5	6848.9	6816.1	7255.1	8369.1	8618.8	8084.5
57.5°	8663.2	8768.0	8644.2	8360.7	7624.4	7544.0	7471.0	7765.1	8868.5	9012.3	8314.1
60°	9248.2	9394.2	9615.3	9538.1	9225.0	9015.5	8345.8	8360.7	9348.7	9285.3	8405.1
62.5°	9819.5	9905.2	10283.9	10367.5	10755.8	10906.0	10225.8	9130.8	9813.2	9474.6	8466.4
65°	9248.2	9358.3	10017.3	10625.6	11880.3	12081.3	11842.2	10525.1	10154.9	9586.8	8395.6
67.5°	8324.7	8391.3	9103.3	10209.9	12468.5	12650.5	12464.3	11805.2	10314.6	9552.9	8175.5
70°	7117.6	7222.3	7921.6	9404.8	12447.4	12544.7	12382.8	11959.7	10254.3	9358.3	7620.1
72.5°	5886.2	5945.5	6537.9	8017.9	11839.1	11920.5	11834.8	11722.7	10051.2	8815.6	6552.7
75°	4424.2	4436.9	5044.1	6331.6	10468.0	10893.3	10998.0	11314.3	9273.6	7556.6	4846.3
77.5°	2966.4	3092.3	3675.2	4838.9	8593.4	9273.6	9769.8	10000.4	7748.1	5639.7	2577.1
80°	1592.2	1623.9	2252.3	3434.0	6530.5	7181.1	7651.9	7656.1	5418.6	2793.9	575.5
82.5°	737.4	706.7	1134.1	2172.9	4523.6	4813.5	5128.7	4296.2	2169.8	477.1	147.0
85°	326.9	344.9	513.1	1059.0	2510.4	2801.3	2761.1	1902.1	380.8	129.1	89.9
87.5°	121.7	128.0	198.9	427.4	896.0	977.5	879.1	366.0	49.7	45.5	27.5
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°	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7	2204.7
2.5°	2208.9	2208.9	2206.8	2178.2	2171.9	2158.1	2146.5	2155.0	2145.4	2151.8	2145.4
5°	2218.4	2213.1	2200.5	2166.6	2150.7	2120.1	2096.8	2102.1	2089.4	2089.4	2088.3
7.5°	2240.7	2230.1	2207.9	2153.9	2124.3	2079.8	2043.9	2032.2	2019.5	2004.7	2002.6
10°	2276.6	2261.8	2232.2	2158.1	2101.0	2041.8	1979.3	1955.0	1923.3	1900.0	1895.8
12.5°	2326.3	2304.1	2263.9	2174.0	2098.9	2004.7	1921.2	1873.6	1835.5	1801.6	1794.2
15°	2398.3	2376.1	2328.5	2205.7	2100.0	1969.8	1859.8	1780.5	1714.9	1683.1	1684.2
17.5°	2503.0	2487.1	2414.1	2272.4	2120.1	1951.8	1809.0	1683.1	1581.6	1528.7	1521.3
20°	2637.4	2626.8	2537.9	2360.2	2166.6	1955.0	1754.0	1579.5	1430.3	1315.0	1289.6
22.5°	2793.9	2778.1	2669.1	2436.4	2202.6	1946.6	1693.7	1465.2	1240.9	1090.7	1061.1
25°	2968.5	2960.0	2789.7	2503.0	2206.8	1910.6	1607.0	1317.1	1035.7	874.9	849.5
27.5°	3191.7	3142.0	2898.7	2539.0	2197.3	1839.7	1483.2	1114.0	823.1	712.0	684.5
30°	3436.1	3335.6	3004.5	2566.5	2150.7	1726.5	1306.5	879.1	612.5	514.1	500.4
32.5°	3706.9	3556.7	3103.9	2564.4	2068.2	1552.0	1077.0	610.4	413.6	373.4	359.7
35°	4196.7	3941.8	3223.5	2529.5	1929.6	1344.6	760.6	397.8	306.8	282.5	279.3
37.5°	4877.0	4444.3	3384.3	2462.8	1750.8	1103.4	496.2	271.9	262.4	263.4	262.4
40°	5434.5	5005.0	3607.5	2362.3	1525.5	788.1	297.3	242.3	247.6	250.7	251.8
42.5°	5980.4	5462.0	3883.6	2236.4	1289.6	512.0	241.2	231.7	227.5	232.7	234.9
45°	6419.4	5860.8	4143.8	2089.4	1013.5	302.6	233.8	214.8	207.4	209.5	212.6
47.5°	6770.6	6178.2	4300.4	1918.0	740.5	228.5	227.5	199.9	189.4	187.2	186.2
50°	7101.7	6450.1	4400.9	1710.6	471.8	220.0	210.5	183.0	170.3	168.2	168.2
52.5°	7327.1	6627.8	4434.8	1465.2	281.4	214.8	198.9	169.3	152.3	155.5	157.6
55°	7547.1	6807.6	4364.9	1145.7	215.8	201.0	186.2	152.3	138.6	151.3	155.5
57.5°	7651.9	6834.1	4207.3	796.6	209.5	182.0	168.2	136.5	125.9	133.3	133.3
60°	7736.5	6816.1	3987.3	504.6	204.2	169.3	153.4	123.8	111.1	106.8	103.7
62.5°	7680.4	6744.2	3545.1	329.0	189.4	154.5	139.6	114.3	96.3	84.6	83.6
65°	7560.9	6490.3	2829.9	259.2	175.6	147.0	126.9	102.6	84.6	70.9	69.8
67.5°	7208.6	5872.5	1831.2	214.8	168.2	141.8	117.4	95.2	75.1	61.4	60.3
70°	6364.4	4743.7	561.7	192.5	174.6	136.5	115.3	86.7	66.6	54.0	51.8
72.5°	5032.5	3169.5	208.4	159.7	150.2	131.2	112.1	78.3	57.1	45.5	43.4
75°	3241.4	1035.7	176.7	123.8	128.0	124.8	103.7	71.9	48.7	37.0	36.0
77.5°	918.3	216.9	160.8	91.0	113.2	120.6	91.0	60.3	43.4	31.7	30.7
80°	192.5	154.5	147.0	64.5	84.6	78.3	61.4	46.5	41.3	27.5	27.5
82.5°	125.9	122.7	125.9	44.4	56.1	57.1	48.7	40.2	36.0	25.4	25.4
85°	88.9	112.1	60.3	31.7	26.4	24.3	28.6	34.9	31.7	21.2	21.2
87.5°	30.7	18.0	12.7	12.7	11.6	11.6	13.8	15.9	16.9	16.9	15.9
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)