

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: P509912

Luminaire Tested: **VERD-M-CA3-160-760-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509912
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-CA3-160-760-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5700K, 1000mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20903 lumens
Efficiency: N/A
Efficacy: 128.5 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

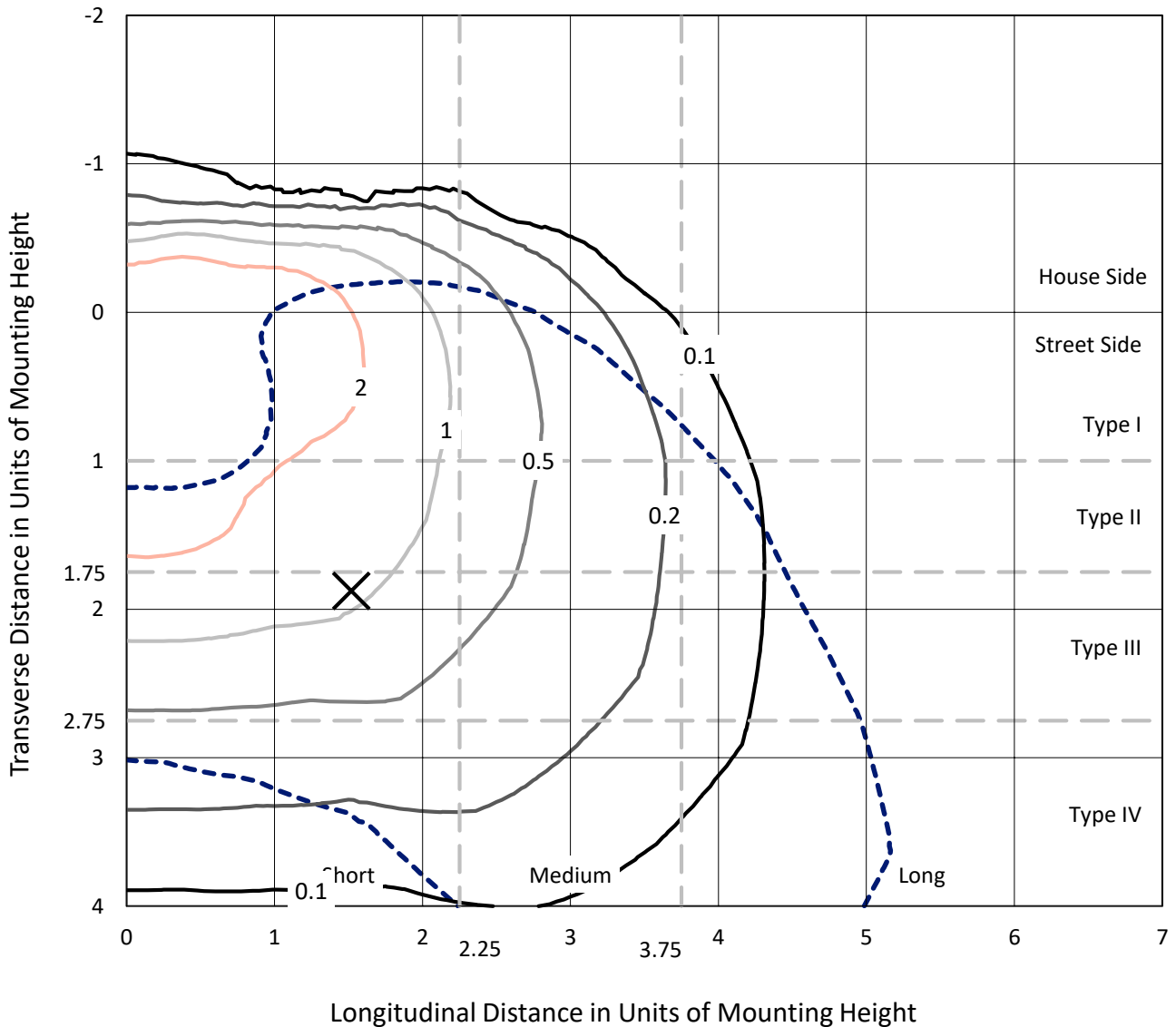
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P509912
 CATALOG NUMBER: VERD-M-CA3-160-760-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

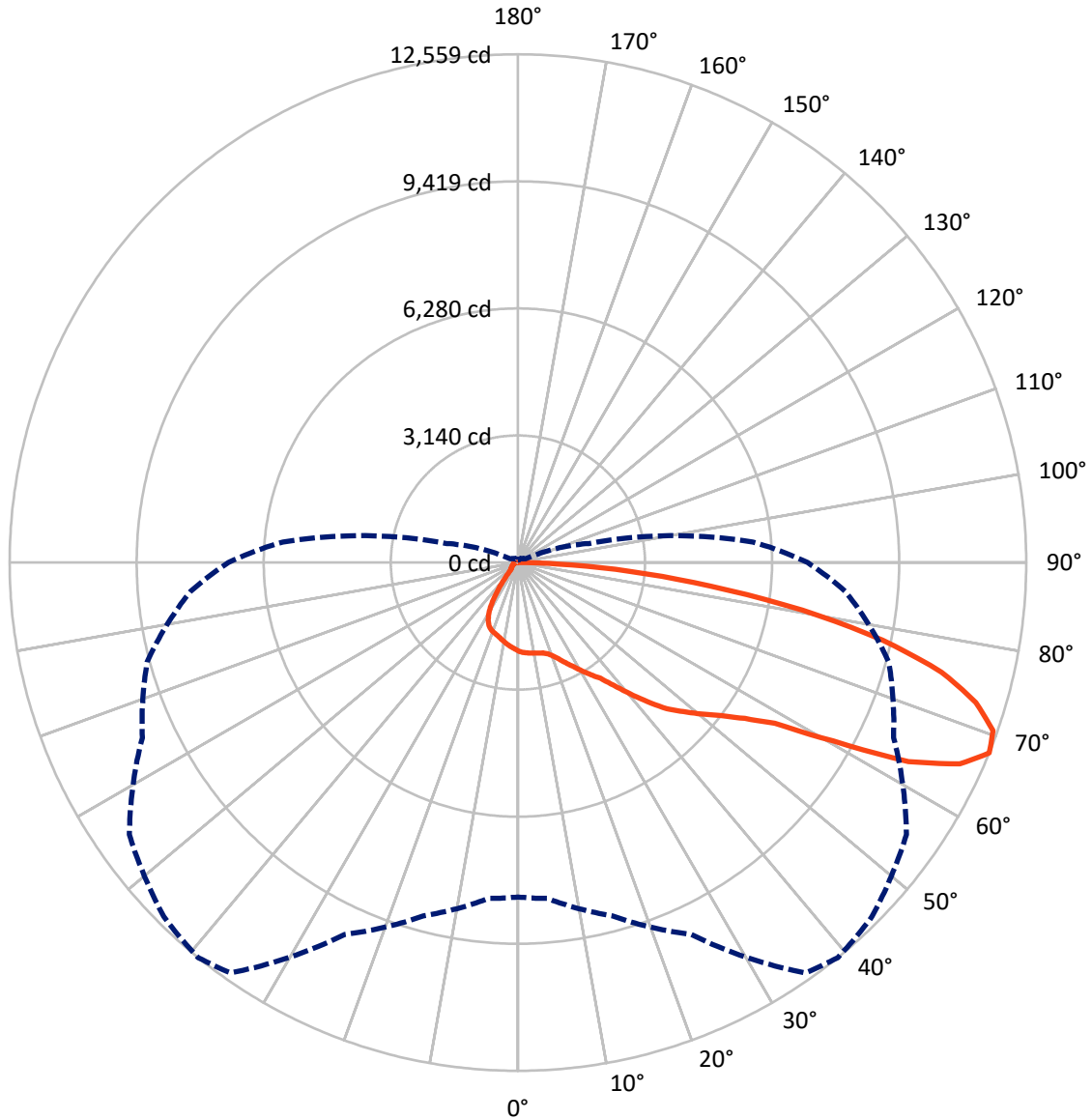
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Short - N/A

REPORT NUMBER: P509912
CATALOG NUMBER: VERD-M-CA3-160-760-U-T4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P509912

CATALOG NUMBER: VERD-M-CA3-160-760-U-T4-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3356.5	0.0	3356.5
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	17546.5	0.0	17546.5
	% Fixture	83.9	0.0	83.9
Total	Lumens	20903.0	0.0	20903.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.6	1.0
10°-20°	615.0	2.9
20°-30°	1089.6	5.2
30°-40°	1745.2	8.3
40°-50°	2799.6	13.4
50°-60°	4092.2	19.6
60°-70°	5453.1	26.1
70°-80°	4092.1	19.6
80°-90°	809.6	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°	20903.0	100.0
0°-180°	20903.0	100.0

Coefficient of Utilization



REPORT NUMBER: P509912

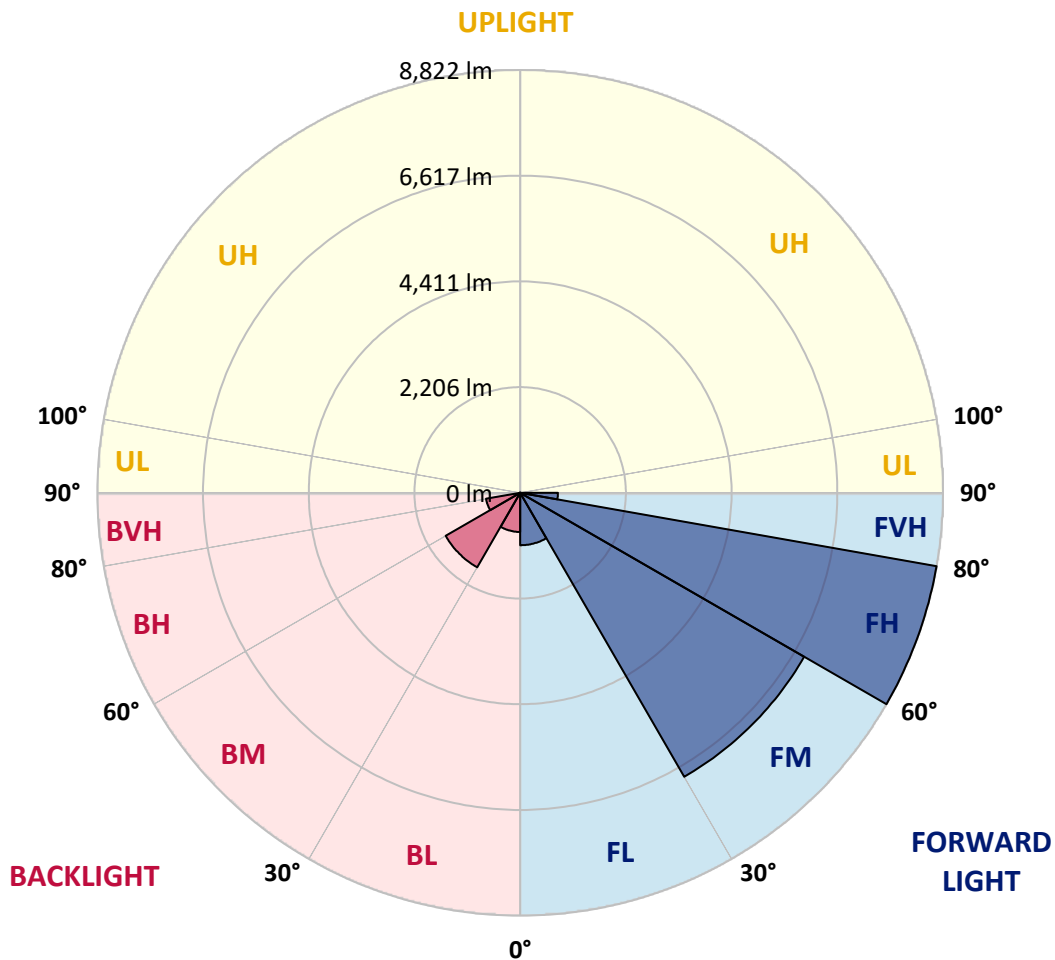
CATALOG NUMBER: VERD-M-CA3-160-760-U-T4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1093.9	5.2			
FM	(30°-60°)	6841.7	32.7			
FH	(60°-80°)	8822.5	42.2			G4/12000
FVH	(80°-90°)	788.4	3.8			G5
BL	(0°-30°)	817.3	3.9	B2/1000		
BM	(30°-60°)	1795.2	8.6	B2/2500		
BH	(60°-80°)	722.7	3.5	B2/1000		G2/1000
BVH	(80°-90°)	21.2	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





REPORT NUMBER: P509912

CATALOG NUMBER: VERD-M-CA3-160-760-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8
2.5°	2190.9	2220.3	2220.3	2211.9	2217.1	2221.3	2189.8	2198.2	2195.1	2194.0	2200.3
5°	2207.7	2240.2	2238.1	2227.6	2231.8	2240.2	2210.8	2223.4	2219.2	2208.7	2210.8
7.5°	2207.7	2235.0	2241.3	2229.7	2249.7	2260.2	2228.7	2240.2	2245.5	2238.1	2230.8
10°	2199.3	2223.4	2231.8	2229.7	2256.0	2272.8	2242.3	2274.9	2279.1	2279.1	2267.5
12.5°	2196.1	2223.4	2235.0	2244.4	2274.9	2292.7	2274.9	2306.4	2327.4	2326.4	2319.0
15°	2198.2	2228.7	2246.5	2262.3	2294.8	2316.9	2309.5	2357.9	2383.1	2390.4	2390.4
17.5°	2250.7	2287.5	2295.9	2312.7	2334.8	2368.4	2358.9	2420.9	2460.8	2473.4	2491.2
20°	2397.8	2426.1	2436.6	2428.2	2437.7	2458.7	2439.8	2499.6	2559.5	2593.1	2622.5
22.5°	2585.8	2606.8	2597.3	2588.9	2583.7	2588.9	2565.8	2605.7	2672.9	2721.3	2771.7
25°	2728.6	2774.8	2767.5	2744.4	2737.0	2743.3	2713.9	2763.3	2825.2	2875.6	2951.3
27.5°	2901.9	2930.3	2910.3	2901.9	2907.2	2906.1	2888.2	2935.5	2992.2	3055.2	3166.6
30°	3089.9	3114.1	3094.1	3085.7	3095.2	3101.5	3081.5	3164.5	3224.3	3292.6	3436.5
32.5°	3398.7	3456.4	3401.8	3292.6	3294.7	3304.2	3306.3	3417.6	3526.8	3580.4	3770.5
35°	3838.7	3885.0	3812.5	3680.2	3515.3	3509.0	3525.8	3691.7	3911.2	4154.9	4377.5
37.5°	4249.4	4316.6	4251.5	4097.1	3896.5	3848.2	3761.0	3958.5	4304.0	4828.1	5105.4
40°	4742.0	4792.4	4663.2	4528.8	4328.2	4259.9	4120.2	4246.3	4719.9	5530.7	5721.9
42.5°	5137.9	5168.4	5061.3	4920.5	4746.2	4694.7	4550.8	4562.4	5164.2	6146.2	6269.1
45°	5504.5	5537.0	5448.8	5329.1	5218.8	5156.8	5051.8	5108.5	5685.1	6795.3	6720.7
47.5°	5782.8	5815.4	5745.0	5659.9	5545.4	5503.4	5505.5	5709.3	6322.6	7314.1	7126.1
50°	6238.6	6226.0	6042.2	5949.8	5860.5	5882.6	5905.7	6195.6	6965.4	7759.4	7501.0
52.5°	7033.7	6971.7	6592.6	6351.0	6240.7	6278.5	6316.3	6701.8	7695.3	8165.9	7788.8
55°	7932.7	7869.7	7547.3	7030.5	6738.5	6799.5	6766.9	7202.8	8308.7	8556.6	8026.2
57.5°	8600.7	8704.7	8581.8	8300.3	7569.3	7489.5	7417.0	7709.0	8804.4	8947.3	8254.1
60°	9181.5	9326.4	9545.9	9469.3	9158.4	8950.4	8285.6	8300.3	9281.3	9218.2	8344.4
62.5°	9748.6	9833.7	10209.7	10292.7	10678.1	10827.3	10151.9	9064.9	9742.3	9406.2	8405.3
65°	9181.5	9290.7	9945.0	10548.9	11794.6	11994.1	11756.7	10449.2	10081.6	9517.6	8335.0
67.5°	8264.6	8330.8	9037.6	10136.2	12378.5	12559.2	12374.3	11720.0	10240.2	9484.0	8116.5
70°	7066.2	7170.2	7864.4	9336.9	12357.5	12454.1	12293.4	11873.3	10180.3	9290.7	7565.1
72.5°	5843.7	5902.5	6490.7	7960.0	11753.6	11834.5	11749.4	11638.1	9978.6	8751.9	6505.4
75°	4392.2	4404.8	5007.7	6285.9	10392.4	10814.7	10918.6	11232.7	9206.7	7502.1	4811.3
77.5°	2945.0	3069.9	3648.6	4803.9	8531.4	9206.7	9699.3	9928.2	7692.2	5599.0	2558.5
80°	1580.7	1612.2	2236.0	3409.2	6483.3	7129.2	7596.6	7600.8	5379.5	2773.8	571.3
82.5°	732.0	701.6	1125.9	2157.3	4491.0	4778.7	5091.7	4265.2	2154.1	473.7	146.0
85°	324.5	342.4	509.4	1051.3	2492.3	2781.1	2741.2	1888.4	378.1	128.1	89.3
87.5°	120.8	127.1	197.5	424.3	889.6	970.5	872.8	363.4	49.4	45.2	27.3
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: P509912
 CATALOG NUMBER: VERD-M-CA3-160-760-U-T4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8	2188.8
2.5°	2193.0	2193.0	2190.9	2162.5	2156.2	2142.6	2131.0	2139.4	2130.0	2136.3	2130.0
5°	2202.4	2197.2	2184.6	2151.0	2135.2	2104.7	2081.6	2086.9	2074.3	2074.3	2073.2
7.5°	2224.5	2214.0	2191.9	2138.4	2108.9	2064.8	2029.1	2017.6	2005.0	1990.3	1988.2
10°	2260.2	2245.5	2216.1	2142.6	2085.8	2027.0	1965.1	1940.9	1909.4	1886.3	1882.1
12.5°	2309.5	2287.5	2247.6	2158.3	2083.7	1990.3	1907.3	1860.0	1822.2	1788.6	1781.3
15°	2381.0	2358.9	2311.6	2189.8	2084.8	1955.6	1846.4	1767.6	1702.5	1671.0	1672.0
17.5°	2484.9	2469.2	2396.7	2256.0	2104.7	1937.8	1796.0	1671.0	1570.2	1517.6	1510.3
20°	2618.3	2607.8	2519.6	2343.2	2151.0	1940.9	1741.4	1568.1	1420.0	1305.5	1280.3
22.5°	2773.8	2758.0	2649.8	2418.8	2186.7	1932.5	1681.5	1454.6	1232.0	1082.8	1053.4
25°	2947.1	2938.7	2769.6	2484.9	2190.9	1896.8	1595.4	1307.6	1028.2	868.6	843.4
27.5°	3168.7	3119.3	2877.7	2520.7	2181.4	1826.4	1472.5	1105.9	817.1	706.8	679.5
30°	3411.3	3311.5	2982.8	2548.0	2135.2	1714.0	1297.1	872.8	608.1	510.4	496.8
32.5°	3680.2	3531.0	3081.5	2545.9	2053.3	1540.7	1069.2	606.0	410.7	370.7	357.1
35°	4166.4	3913.3	3200.2	2511.2	1915.7	1334.9	755.1	394.9	304.6	280.4	277.3
37.5°	4841.8	4412.2	3359.8	2445.0	1738.2	1095.4	492.6	269.9	260.5	261.5	260.5
40°	5395.2	4968.8	3581.4	2345.3	1514.5	782.5	295.1	240.5	245.8	248.9	250.0
42.5°	5937.2	5422.6	3855.5	2220.3	1280.3	508.3	239.5	230.0	225.8	231.1	233.2
45°	6373.1	5818.5	4113.9	2074.3	1006.2	300.4	232.1	213.2	205.9	208.0	211.1
47.5°	6721.7	6133.6	4269.4	1904.1	735.2	226.9	225.8	198.5	188.0	185.9	184.8
50°	7050.5	6403.5	4369.1	1698.3	468.4	218.5	209.0	181.7	169.1	167.0	167.0
52.5°	7274.2	6580.0	4402.7	1454.6	279.4	213.2	197.5	168.0	151.2	154.4	156.5
55°	7492.6	6758.5	4333.4	1137.4	214.3	199.6	184.8	151.2	137.6	150.2	154.4
57.5°	7596.6	6784.8	4176.9	790.9	208.0	180.6	167.0	135.5	125.0	132.3	132.3
60°	7680.6	6766.9	3958.5	501.0	202.7	168.0	152.3	122.9	110.3	106.1	102.9
62.5°	7625.0	6695.5	3519.5	326.6	188.0	153.3	138.6	113.4	95.6	84.0	83.0
65°	7506.3	6443.4	2809.5	257.3	174.3	146.0	126.0	101.9	84.0	70.4	69.3
67.5°	7156.6	5830.1	1818.0	213.2	167.0	140.7	116.6	94.5	74.6	60.9	59.9
70°	6318.4	4709.4	557.7	191.1	173.3	135.5	114.5	86.1	66.2	53.6	51.5
72.5°	4996.1	3146.6	206.9	158.6	149.1	130.2	111.3	77.7	56.7	45.2	43.1
75°	3218.0	1028.2	175.4	122.9	127.1	123.9	102.9	71.4	48.3	36.8	35.7
77.5°	911.6	215.3	159.6	90.3	112.4	119.7	90.3	59.9	43.1	31.5	30.5
80°	191.1	153.3	146.0	64.1	84.0	77.7	60.9	46.2	41.0	27.3	27.3
82.5°	125.0	121.8	125.0	44.1	55.7	56.7	48.3	39.9	35.7	25.2	25.2
85°	88.2	111.3	59.9	31.5	26.3	24.2	28.4	34.7	31.5	21.0	21.0
87.5°	30.5	17.9	12.6	12.6	11.6	11.6	13.7	15.8	16.8	16.8	15.8
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)