

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: P510112

Luminaire Tested: **VERD-M-CA4-210-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510112
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-CA4-210-722-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2200K, 960mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22070 lumens
Efficiency: N/A
Efficacy: 103.3 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

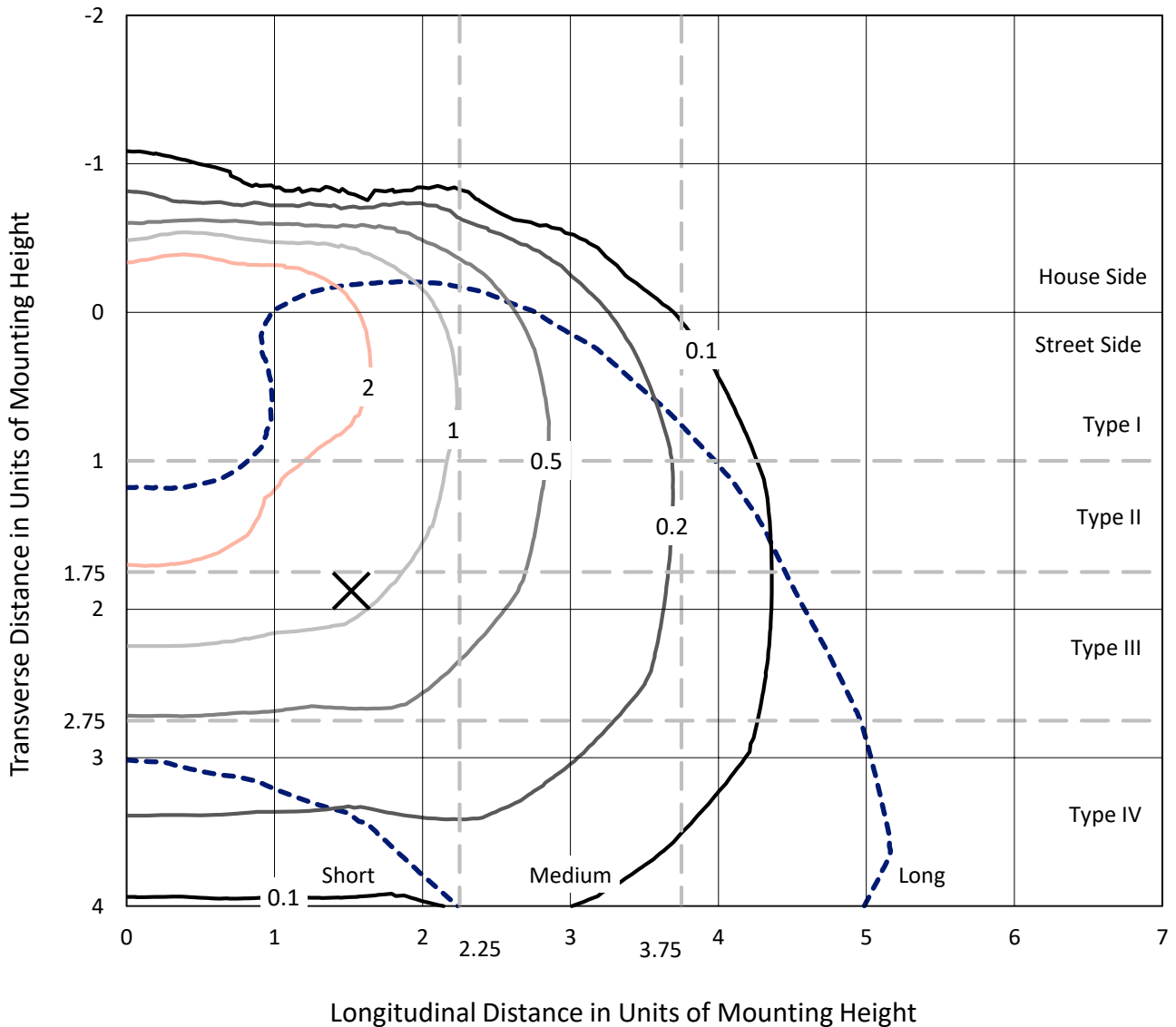
Input Watts (W): 213.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510112
 CATALOG NUMBER: VERD-M-CA4-210-722-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

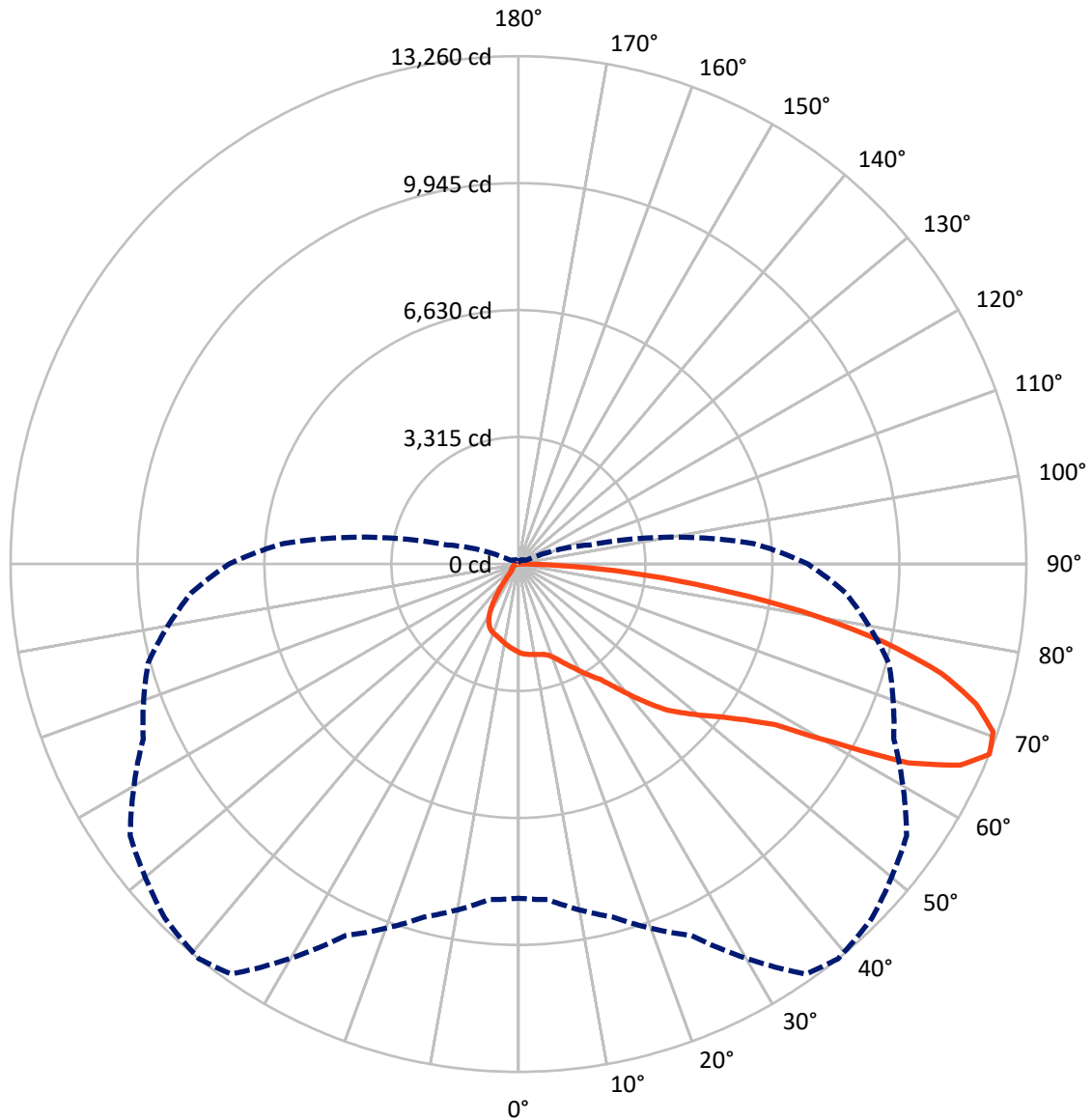
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Short - N/A

REPORT NUMBER: P510112
CATALOG NUMBER: VERD-M-CA4-210-722-U-T4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510112

CATALOG NUMBER: VERD-M-CA4-210-722-U-T4-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3543.9	0.0	3543.9
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	18526.1	0.0	18526.1
	% Fixture	83.9	0.0	83.9
Total	Lumens	22070.0	0.0	22070.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.2	1.0
10°-20°	649.3	2.9
20°-30°	1150.4	5.2
30°-40°	1842.6	8.3
40°-50°	2955.9	13.4
50°-60°	4320.7	19.6
60°-70°	5757.5	26.1
70°-80°	4320.5	19.6
80°-90°	854.8	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°	22070.0	100.0
0°-180°	22070.0	100.0

Coefficient of Utilization



REPORT NUMBER: P510112

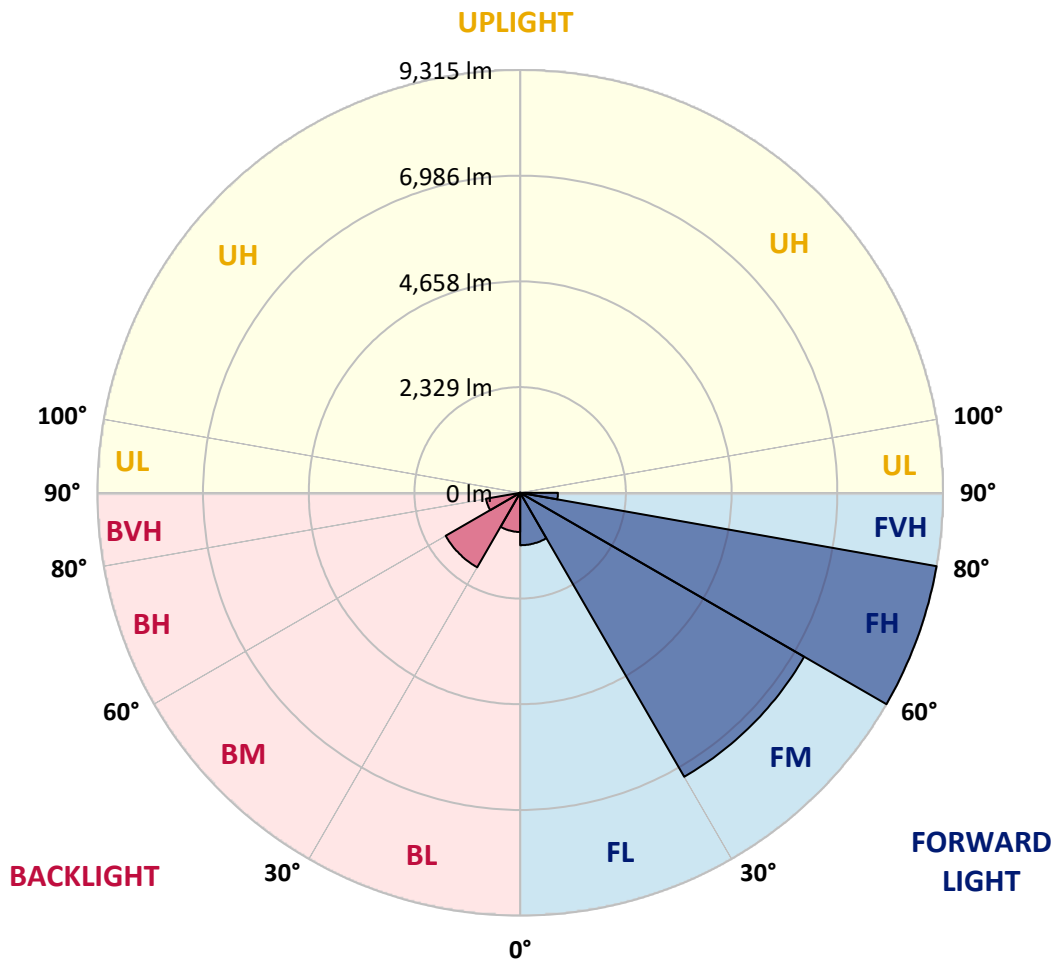
CATALOG NUMBER: VERD-M-CA4-210-722-U-T4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1155.0	5.2			
FM (30°-60°)	7223.7	32.7			
FH (60°-80°)	9315.0	42.2			G4/12000
FVH (80°-90°)	832.4	3.8			G5
BL (0°-30°)	863.0	3.9	B2/1000		
BM (30°-60°)	1895.5	8.6	B2/2500		
BH (60°-80°)	763.1	3.5	B2/1000		G2/1000
BVH (80°-90°)	22.4	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





REPORT NUMBER: P510112

CATALOG NUMBER: VERD-M-CA4-210-722-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0
2.5°	2313.2	2344.2	2344.2	2335.4	2340.9	2345.3	2312.1	2320.9	2317.6	2316.5	2323.2
5°	2330.9	2365.3	2363.1	2352.0	2356.4	2365.3	2334.3	2347.6	2343.1	2332.0	2334.3
7.5°	2330.9	2359.8	2366.4	2354.2	2375.3	2386.4	2353.1	2365.3	2370.8	2363.1	2355.3
10°	2322.1	2347.6	2356.4	2354.2	2381.9	2399.7	2367.5	2401.9	2406.3	2406.3	2394.1
12.5°	2318.7	2347.6	2359.8	2369.7	2401.9	2420.7	2401.9	2435.2	2457.3	2456.2	2448.5
15°	2320.9	2353.1	2372.0	2388.6	2423.0	2446.3	2438.5	2489.5	2516.1	2523.9	2523.9
17.5°	2376.4	2415.2	2424.1	2441.8	2465.1	2500.6	2490.6	2556.0	2598.2	2611.5	2630.3
20°	2531.6	2561.6	2572.7	2563.8	2573.8	2596.0	2576.0	2639.2	2702.4	2737.9	2768.9
22.5°	2730.1	2752.3	2742.3	2733.5	2727.9	2733.5	2709.1	2751.2	2822.2	2873.2	2926.4
25°	2880.9	2929.7	2922.0	2897.6	2889.8	2896.5	2865.4	2917.5	2983.0	3036.2	3116.0
27.5°	3063.9	3093.9	3072.8	3063.9	3069.5	3068.3	3049.5	3099.4	3159.3	3225.8	3343.4
30°	3262.4	3287.9	3266.8	3258.0	3268.0	3274.6	3253.5	3341.1	3404.3	3476.4	3628.3
32.5°	3588.4	3649.4	3591.8	3476.4	3478.6	3488.6	3490.8	3608.4	3723.7	3780.3	3981.0
35°	4053.1	4101.9	4025.3	3885.6	3711.5	3704.9	3722.6	3897.8	4129.6	4386.8	4621.9
37.5°	4486.6	4557.6	4488.9	4325.9	4114.0	4063.0	3971.0	4179.5	4544.3	5097.7	5390.4
40°	5006.7	5059.9	4923.6	4781.6	4569.8	4497.7	4350.2	4483.3	4983.4	5839.5	6041.3
42.5°	5424.8	5456.9	5343.8	5195.2	5011.2	4956.8	4804.9	4817.1	5452.5	6489.3	6619.1
45°	5811.8	5846.2	5753.0	5626.6	5510.2	5444.7	5333.8	5393.7	6002.5	7174.6	7095.9
47.5°	6105.6	6140.0	6065.7	5975.9	5855.0	5810.7	5812.9	6028.0	6675.6	7722.4	7523.9
50°	6586.9	6573.6	6379.5	6282.0	6187.7	6211.0	6235.4	6541.4	7354.3	8192.6	7919.8
52.5°	7426.4	7360.9	6960.6	6705.6	6589.1	6629.1	6669.0	7075.9	8125.0	8621.8	8223.7
55°	8375.6	8309.0	7968.6	7423.0	7114.8	7179.1	7144.7	7604.9	8772.6	9034.3	8474.3
57.5°	9080.8	9190.6	9060.9	8763.7	7991.9	7907.6	7831.1	8139.4	9296.0	9446.8	8714.9
60°	9694.1	9847.1	10078.9	9997.9	9669.7	9450.1	8748.2	8763.7	9799.4	9732.9	8810.3
62.5°	10292.9	10382.7	10779.7	10867.3	11274.3	11431.7	10718.7	9571.0	10286.2	9931.4	8874.6
65°	9694.1	9809.4	10500.3	11137.9	12453.0	12663.7	12413.1	11032.5	10644.4	10048.9	8800.3
67.5°	8726.0	8795.9	9542.2	10702.1	13069.6	13260.3	13065.2	12374.3	10811.9	10013.4	8569.6
70°	7460.7	7570.5	8303.5	9858.2	13047.4	13149.4	12979.8	12536.2	10748.6	9809.4	7987.5
72.5°	6170.0	6232.1	6853.1	8404.4	12409.8	12495.2	12405.4	12287.8	10535.7	9240.5	6868.6
75°	4637.5	4650.8	5287.3	6636.8	10972.6	11418.4	11528.2	11859.8	9720.7	7920.9	5079.9
77.5°	3109.4	3241.3	3852.3	5072.1	9007.7	9720.7	10240.8	10482.5	8121.6	5911.6	2701.3
80°	1668.9	1702.2	2360.9	3599.5	6845.3	7527.3	8020.7	8025.2	5679.8	2928.6	603.2
82.5°	772.9	740.8	1188.7	2277.7	4741.7	5045.5	5376.0	4503.3	2274.4	500.1	154.1
85°	342.7	361.5	537.8	1110.0	2631.4	2936.4	2894.3	1993.8	399.2	135.3	94.3
87.5°	127.5	134.2	208.5	448.0	939.2	1024.6	921.5	383.7	52.1	47.7	28.8
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: P510112

CATALOG NUMBER: VERD-M-CA4-210-722-U-T4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0
2.5°	2315.4	2315.4	2313.2	2283.2	2276.6	2262.2	2250.0	2258.8	2248.9	2255.5	2248.9
5°	2325.4	2319.8	2306.5	2271.0	2254.4	2222.3	2197.9	2203.4	2190.1	2190.1	2189.0
7.5°	2348.7	2337.6	2314.3	2257.7	2226.7	2180.1	2142.4	2130.2	2116.9	2101.4	2099.2
10°	2386.4	2370.8	2339.8	2262.2	2202.3	2140.2	2074.8	2049.3	2016.0	1991.6	1987.2
12.5°	2438.5	2415.2	2373.1	2278.8	2200.1	2101.4	2013.8	1963.9	1924.0	1888.5	1880.7
15°	2513.9	2490.6	2440.7	2312.1	2201.2	2064.8	1949.5	1866.3	1797.5	1764.3	1765.4
17.5°	2623.7	2607.0	2530.5	2381.9	2222.3	2045.9	1896.2	1764.3	1657.8	1602.4	1594.6
20°	2764.5	2753.4	2660.3	2474.0	2271.0	2049.3	1838.6	1655.6	1499.2	1378.4	1351.8
22.5°	2928.6	2912.0	2797.8	2553.8	2308.7	2040.4	1775.4	1535.8	1300.7	1143.3	1112.2
25°	3111.6	3102.7	2924.2	2623.7	2313.2	2002.7	1684.4	1380.6	1085.6	917.1	890.5
27.5°	3345.6	3293.5	3038.4	2661.4	2303.2	1928.4	1554.7	1167.7	862.7	746.3	717.5
30°	3601.7	3496.4	3149.3	2690.2	2254.4	1809.7	1369.5	921.5	642.1	538.9	524.5
32.5°	3885.6	3728.1	3253.5	2688.0	2167.9	1626.8	1128.9	639.8	433.6	391.4	377.0
35°	4399.0	4131.8	3378.8	2651.4	2022.6	1409.4	797.3	416.9	321.6	296.1	292.8
37.5°	5112.1	4658.5	3547.4	2581.5	1835.2	1156.6	520.1	285.0	275.0	276.1	275.0
40°	5696.5	5246.2	3781.4	2476.2	1599.0	826.1	311.6	253.9	259.5	262.8	263.9
42.5°	6268.7	5725.3	4070.8	2344.2	1351.8	536.7	252.8	242.9	238.4	244.0	246.2
45°	6728.9	6143.4	4343.6	2190.1	1062.3	317.1	245.1	225.1	217.3	219.6	222.9
47.5°	7097.0	6476.0	4507.7	2010.5	776.2	239.5	238.4	209.6	198.5	196.3	195.2
50°	7444.1	6761.0	4613.1	1793.1	494.6	230.7	220.7	191.8	178.5	176.3	176.3
52.5°	7680.3	6947.3	4648.5	1535.8	295.0	225.1	208.5	177.4	159.7	163.0	165.2
55°	7911.0	7135.8	4575.4	1200.9	226.2	210.7	195.2	159.7	145.3	158.6	163.0
57.5°	8020.7	7163.5	4410.1	835.0	219.6	190.7	176.3	143.0	132.0	139.7	139.7
60°	8109.4	7144.7	4179.5	528.9	214.0	177.4	160.8	129.7	116.4	112.0	108.7
62.5°	8050.7	7069.3	3716.0	344.9	198.5	161.9	146.4	119.8	100.9	88.7	87.6
65°	7925.4	6803.2	2966.3	271.7	184.1	154.1	133.1	107.6	88.7	74.3	73.2
67.5°	7556.1	6155.5	1919.5	225.1	176.3	148.6	123.1	99.8	78.7	64.3	63.2
70°	6671.2	4972.3	588.8	201.8	183.0	143.0	120.9	90.9	69.9	56.6	54.3
72.5°	5275.1	3322.3	218.5	167.4	157.5	137.5	117.5	82.1	59.9	47.7	45.5
75°	3397.7	1085.6	185.2	129.7	134.2	130.9	108.7	75.4	51.0	38.8	37.7
77.5°	962.5	227.3	168.6	95.4	118.7	126.4	95.4	63.2	45.5	33.3	32.2
80°	201.8	161.9	154.1	67.6	88.7	82.1	64.3	48.8	43.2	28.8	28.8
82.5°	132.0	128.6	132.0	46.6	58.8	59.9	51.0	42.1	37.7	26.6	26.6
85°	93.1	117.5	63.2	33.3	27.7	25.5	29.9	36.6	33.3	22.2	22.2
87.5°	32.2	18.9	13.3	13.3	12.2	12.2	14.4	16.6	17.7	17.7	16.6
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)