

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: P509856

Luminaire Tested: **VERD-M-CA3-150-750-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509856
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-CA3-150-750-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 940mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20267 lumens
Efficiency: N/A
Efficacy: 132.5 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

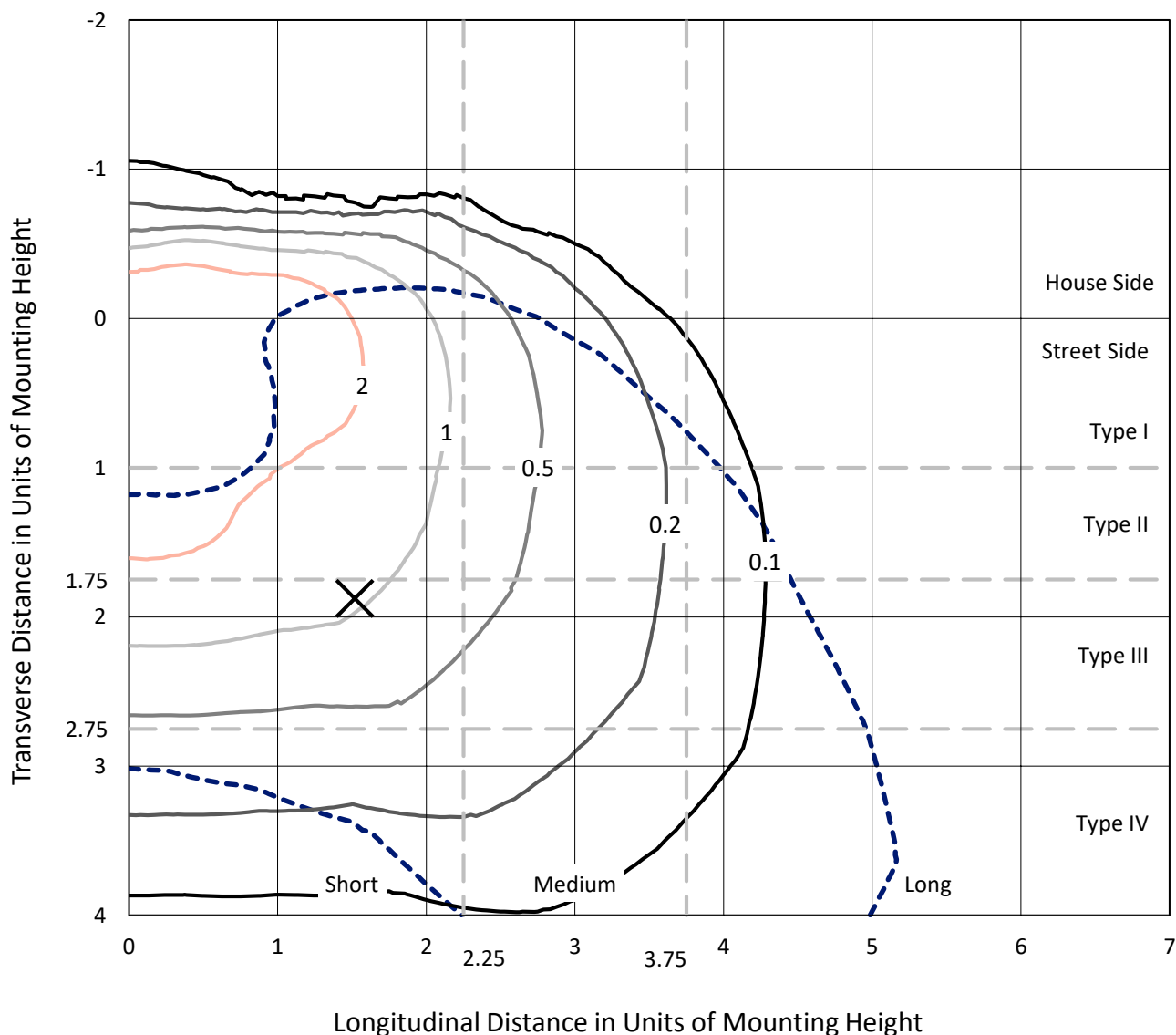
Input Watts (W): 153
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

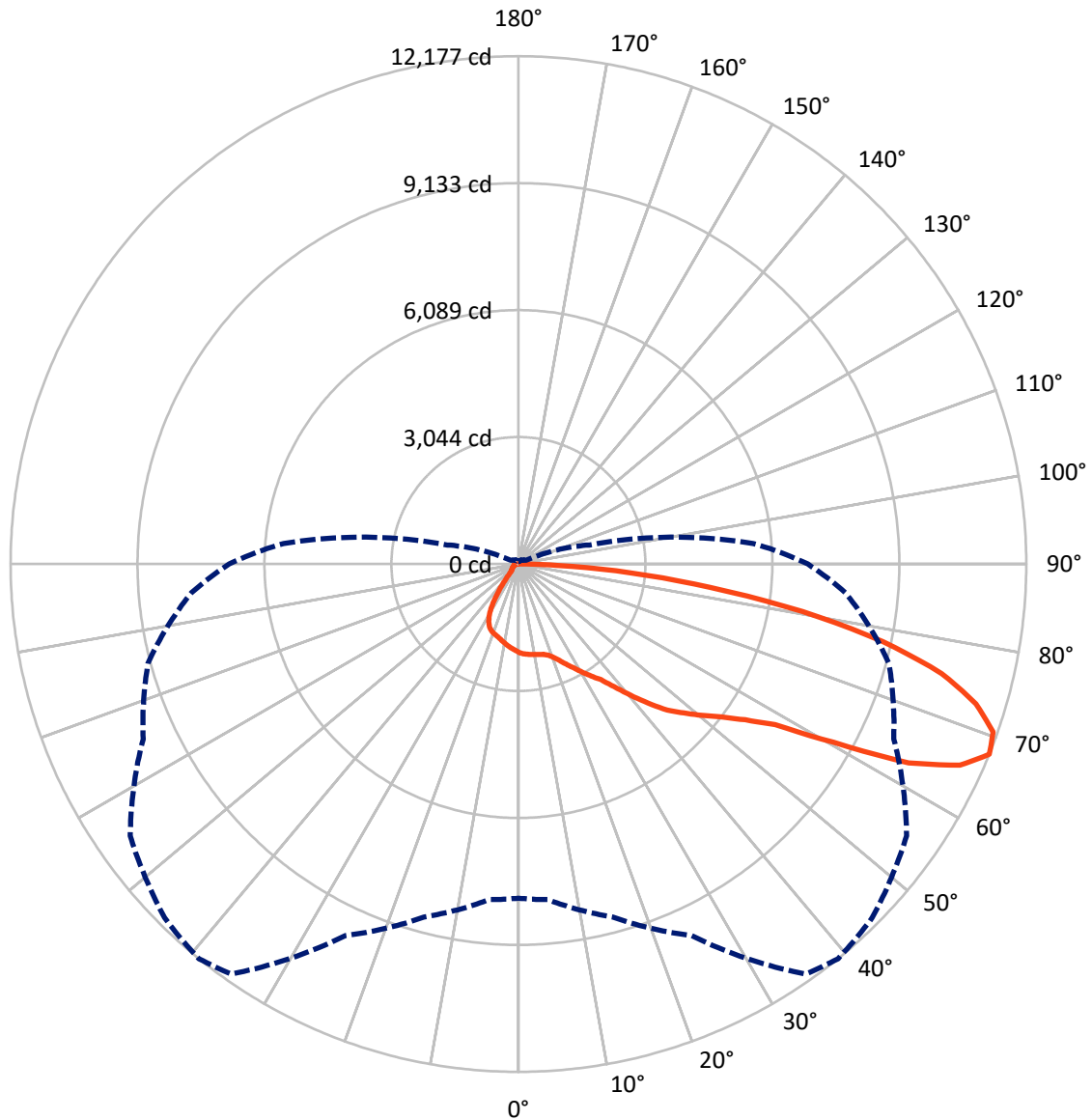
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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
House Side	Lumens	3254.4	0.0	3254.4
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	17012.6	0.0	17012.6
	% Fixture	83.9	0.0	83.9
Total	Lumens	20267.0	0.0	20267.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.3	1.0
10°-20°	596.3	2.9
20°-30°	1056.4	5.2
30°-40°	1692.1	8.3
40°-50°	2714.4	13.4
50°-60°	3967.7	19.6
60°-70°	5287.2	26.1
70°-80°	3967.6	19.6
80°-90°	785.0	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°	20267.0	100.0
0°-180°	20267.0	100.0

Coefficient of Utilization



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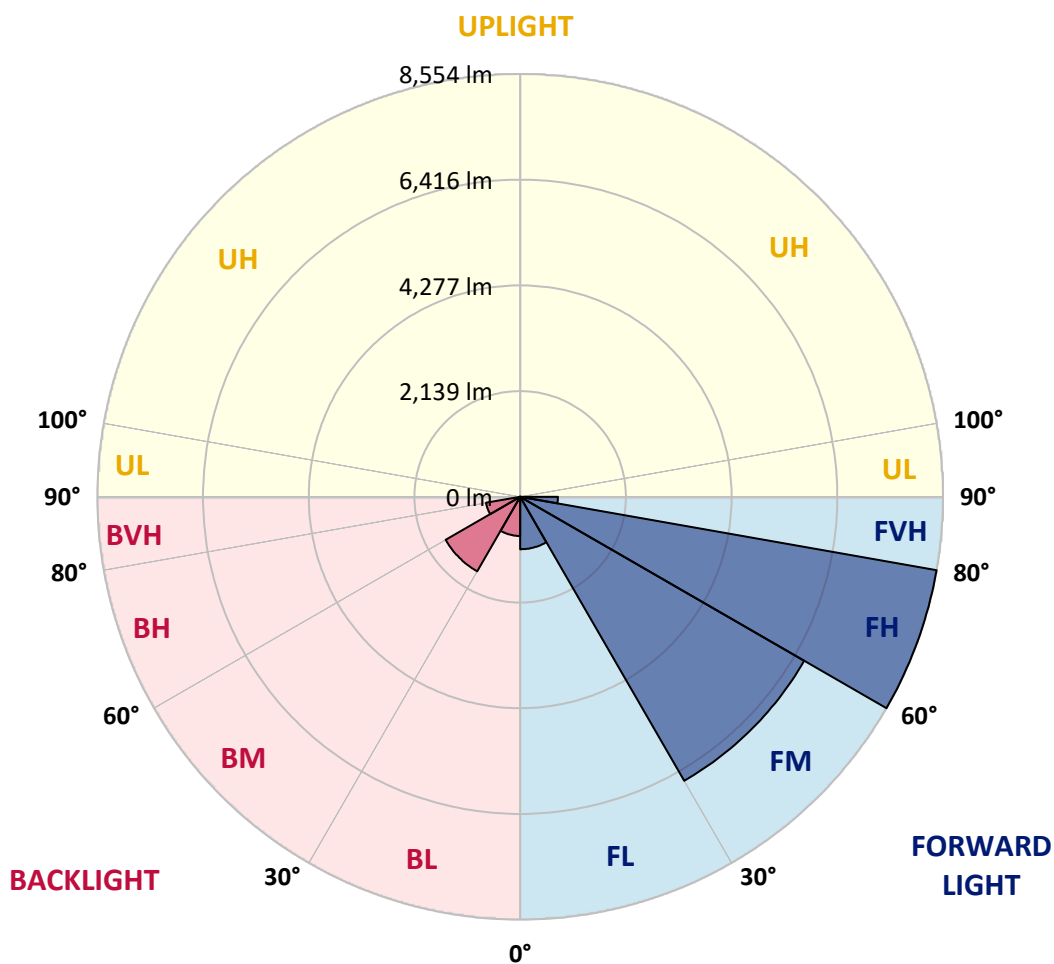
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1060.6	5.2			
FM (30°-60°)	6633.6	32.7			
FH (60°-80°)	8554.0	42.2			G4/12000
FVH (80°-90°)	764.4	3.8			G5
BL (0°-30°)	792.5	3.9	B2/1000		
BM (30°-60°)	1740.6	8.6	B2/2500		
BH (60°-80°)	700.7	3.5	B2/1000		G2/1000
BVH (80°-90°)	20.6	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°	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2
2.5°	2124.2	2152.7	2152.7	2144.6	2149.7	2153.7	2123.2	2131.3	2128.3	2127.3	2133.4
5°	2140.5	2172.1	2170.0	2159.8	2163.9	2172.1	2143.6	2155.8	2151.7	2141.5	2143.6
7.5°	2140.5	2167.0	2173.1	2161.9	2181.2	2191.4	2160.9	2172.1	2177.2	2170.0	2162.9
10°	2132.4	2155.8	2163.9	2161.9	2187.3	2203.6	2174.1	2205.7	2209.7	2209.7	2198.5
12.5°	2129.3	2155.8	2167.0	2176.1	2205.7	2223.0	2205.7	2236.2	2256.6	2255.6	2248.4
15°	2131.3	2160.9	2178.2	2193.5	2225.0	2246.4	2239.3	2286.1	2310.6	2317.7	2317.7
17.5°	2182.3	2217.9	2226.0	2242.3	2263.7	2296.3	2287.1	2347.2	2385.9	2398.1	2415.4
20°	2324.8	2352.3	2362.5	2354.3	2363.5	2383.9	2365.5	2423.6	2481.6	2514.2	2542.7
22.5°	2507.1	2527.5	2518.3	2510.1	2505.1	2510.1	2487.7	2526.4	2591.6	2638.5	2687.3
25°	2645.6	2690.4	2683.3	2660.9	2653.7	2659.8	2631.3	2679.2	2739.3	2788.2	2861.5
27.5°	2813.6	2841.1	2821.8	2813.6	2818.7	2817.7	2800.4	2846.2	2901.2	2962.3	3070.2
30°	2995.9	3019.3	3000.0	2991.8	3001.0	3007.1	2987.7	3068.2	3126.2	3192.4	3331.9
32.5°	3295.3	3351.3	3298.3	3192.4	3194.5	3203.6	3205.7	3313.6	3419.5	3471.4	3655.8
35°	3721.9	3766.8	3696.5	3568.2	3408.3	3402.2	3418.5	3579.4	3792.2	4028.5	4244.3
37.5°	4120.1	4185.3	4122.1	3972.5	3778.0	3731.1	3646.6	3838.0	4173.1	4681.2	4950.0
40°	4597.7	4646.6	4521.3	4391.0	4196.5	4130.3	3994.9	4117.1	4576.3	5362.5	5547.8
42.5°	4981.6	5011.1	4907.3	4770.8	4601.8	4551.9	4412.4	4423.6	5007.1	5959.2	6078.3
45°	5337.0	5368.6	5283.0	5166.9	5060.0	4999.9	4898.1	4953.1	5512.1	6588.5	6516.2
47.5°	5606.8	5638.4	5570.2	5487.7	5376.7	5336.0	5338.0	5535.6	6130.3	7091.6	6909.3
50°	6048.8	6036.6	5858.4	5768.8	5682.2	5703.6	5726.0	6007.0	6753.5	7523.3	7272.8
52.5°	6819.7	6759.6	6392.0	6157.8	6050.8	6087.5	6124.2	6497.9	7461.2	7917.4	7551.8
55°	7691.3	7630.2	7317.6	6816.6	6533.5	6592.6	6561.0	6983.6	8055.9	8296.2	7782.0
57.5°	8339.0	8439.8	8320.7	8047.8	7339.0	7261.6	7191.3	7474.4	8536.5	8675.0	8002.9
60°	8902.1	9042.6	9255.5	9181.1	8879.7	8678.1	8033.5	8047.8	8998.9	8937.8	8090.5
62.5°	9452.0	9534.5	9899.1	9979.5	10353.2	10497.8	9843.0	8789.1	9445.9	9120.0	8149.6
65°	8902.1	9008.0	9642.4	10228.0	11435.7	11629.2	11399.0	10131.2	9774.8	9228.0	8081.4
67.5°	8013.1	8077.3	8762.6	9827.8	12001.9	12177.0	11997.8	11363.4	9928.6	9195.4	7869.5
70°	6851.2	6952.0	7625.2	9052.8	11981.5	12075.2	11919.4	11512.1	9870.5	9008.0	7334.9
72.5°	5665.9	5722.9	6293.2	7717.8	11396.0	11474.4	11391.9	11284.0	9675.0	8485.6	6307.5
75°	4258.6	4270.8	4855.3	6094.6	10076.2	10485.6	10586.4	10890.9	8926.6	7273.8	4664.9
77.5°	2855.4	2976.5	3537.6	4657.8	8271.8	8926.6	9404.2	9626.1	7458.1	5428.6	2480.6
80°	1532.6	1563.1	2168.0	3305.5	6286.1	6912.3	7365.5	7369.6	5215.8	2689.4	554.0
82.5°	709.8	680.2	1091.6	2091.6	4354.3	4633.3	4936.8	4135.4	2088.6	459.3	141.5
85°	314.7	332.0	493.9	1019.3	2416.5	2696.5	2657.8	1830.9	366.6	124.2	86.6
87.5°	117.1	123.2	191.4	411.4	862.5	940.9	846.2	352.3	47.9	43.8	26.5
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°	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2	2122.2
2.5°	2126.2	2126.2	2124.2	2096.7	2090.6	2077.4	2066.2	2074.3	2065.1	2071.3	2065.1
5°	2135.4	2130.3	2118.1	2085.5	2070.2	2040.7	2018.3	2023.4	2011.2	2011.2	2010.2
7.5°	2156.8	2146.6	2125.2	2073.3	2044.8	2002.0	1967.4	1956.2	1944.0	1929.7	1927.7
10°	2191.4	2177.2	2148.6	2077.4	2022.4	1965.4	1905.3	1881.8	1851.3	1828.9	1824.8
12.5°	2239.3	2217.9	2179.2	2092.6	2020.3	1929.7	1849.3	1803.4	1766.8	1734.2	1727.1
15°	2308.5	2287.1	2241.3	2123.2	2021.4	1896.1	1790.2	1713.8	1650.7	1620.1	1621.2
17.5°	2409.3	2394.1	2323.8	2187.3	2040.7	1878.8	1741.3	1620.1	1522.4	1471.5	1464.3
20°	2538.7	2528.5	2442.9	2271.9	2085.5	1881.8	1688.4	1520.3	1376.8	1265.8	1241.3
22.5°	2689.4	2674.1	2569.2	2345.2	2120.1	1873.7	1630.3	1410.4	1194.5	1049.9	1021.4
25°	2857.4	2849.2	2685.3	2409.3	2124.2	1839.1	1546.8	1267.8	996.9	842.1	817.7
27.5°	3072.3	3024.4	2790.2	2444.0	2115.0	1770.9	1427.7	1072.3	792.3	685.3	658.9
30°	3307.5	3210.8	2892.0	2470.4	2070.2	1661.9	1257.6	846.2	589.6	494.9	481.7
32.5°	3568.2	3423.6	2987.7	2468.4	1990.8	1493.9	1036.6	587.6	398.2	359.5	346.2
35°	4039.7	3794.2	3102.8	2434.8	1857.4	1294.3	732.2	382.9	295.3	271.9	268.8
37.5°	4694.4	4277.9	3257.6	2370.6	1685.3	1062.1	477.6	261.7	252.5	253.6	252.5
40°	5231.1	4817.7	3472.5	2273.9	1468.4	758.6	286.1	233.2	238.3	241.3	242.4
42.5°	5756.5	5257.6	3738.2	2152.7	1241.3	492.9	232.2	223.0	218.9	224.0	226.1
45°	6179.1	5641.5	3988.7	2011.2	975.5	291.2	225.0	206.7	199.6	201.6	204.7
47.5°	6517.2	5947.0	4139.5	1846.2	712.8	220.0	218.9	192.5	182.3	180.2	179.2
50°	6836.0	6208.7	4236.2	1646.6	454.2	211.8	202.6	176.2	163.9	161.9	161.9
52.5°	7052.9	6379.8	4268.8	1410.4	270.9	206.7	191.4	162.9	146.6	149.7	151.7
55°	7264.7	6552.9	4201.6	1102.8	207.7	193.5	179.2	146.6	133.4	145.6	149.7
57.5°	7365.5	6578.3	4049.8	766.8	201.6	175.2	161.9	131.4	121.2	128.3	128.3
60°	7446.9	6561.0	3838.0	485.7	196.5	162.9	147.7	119.1	106.9	102.8	99.8
62.5°	7393.0	6491.8	3412.4	316.7	182.3	148.7	134.4	110.0	92.7	81.5	80.4
65°	7277.9	6247.4	2724.0	249.5	169.0	141.5	122.2	98.8	81.5	68.2	67.2
67.5°	6938.8	5652.7	1762.7	206.7	161.9	136.5	113.0	91.6	72.3	59.1	58.0
70°	6126.2	4566.1	540.7	185.3	168.0	131.4	111.0	83.5	64.2	51.9	49.9
72.5°	4844.1	3050.9	200.6	153.8	144.6	126.3	107.9	75.4	55.0	43.8	41.8
75°	3120.1	996.9	170.1	119.1	123.2	120.2	99.8	69.2	46.8	35.6	34.6
77.5°	883.9	208.8	154.8	87.6	109.0	116.1	87.6	58.0	41.8	30.5	29.5
80°	185.3	148.7	141.5	62.1	81.5	75.4	59.1	44.8	39.7	26.5	26.5
82.5°	121.2	118.1	121.2	42.8	54.0	55.0	46.8	38.7	34.6	24.4	24.4
85°	85.5	107.9	58.0	30.5	25.5	23.4	27.5	33.6	30.5	20.4	20.4
87.5°	29.5	17.3	12.2	12.2	11.2	11.2	13.2	15.3	16.3	16.3	15.3
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)