

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: P509892

Luminaire Tested: **VERD-M-CA3-160-740-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509892  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA3-160-740-U-T2-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 1000mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21336 lumens  
Efficiency: N/A  
Efficacy: 131.1 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

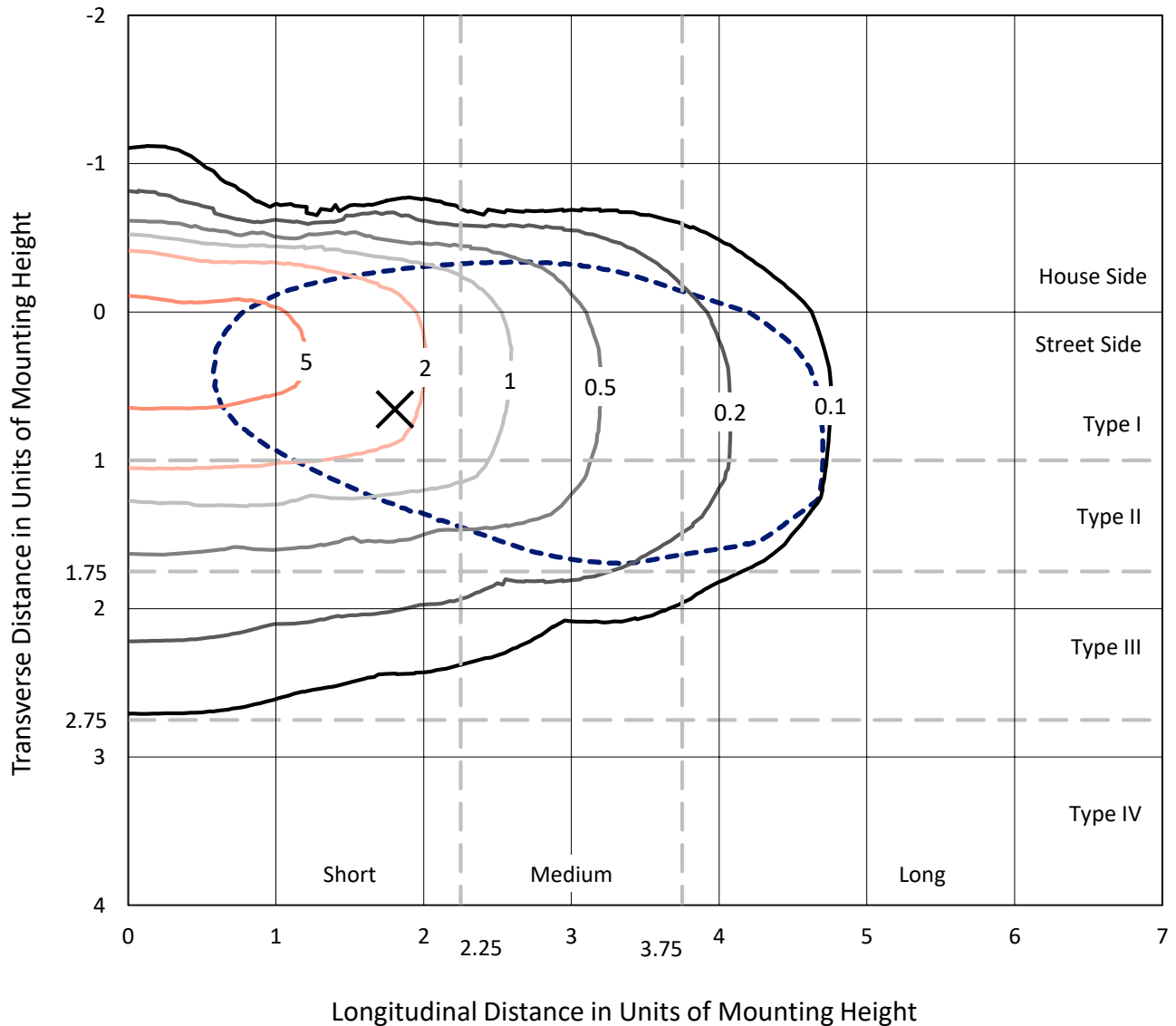
Input Watts (W): 162.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

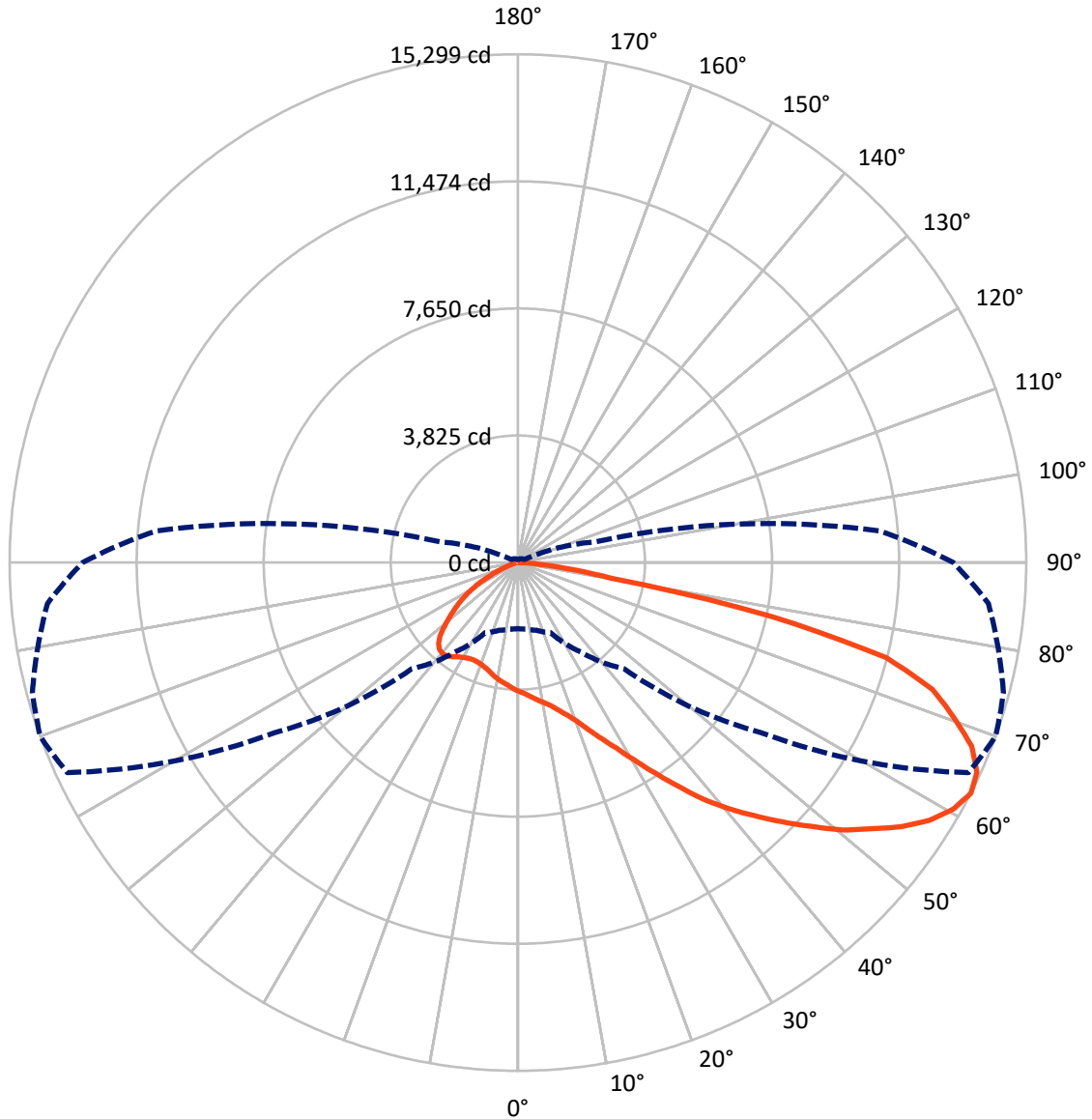
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4486.7	0.0	4486.7
	% Fixture	21.0	0.0	21.0
<b>Street Side</b>	Lumens	16849.3	0.0	16849.3
	% Fixture	79.0	0.0	79.0
<b>Total</b>	Lumens	21336.0	0.0	21336.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	368.3	1.7
10°-20°	1099.0	5.2
20°-30°	1863.2	8.7
30°-40°	2739.9	12.8
40°-50°	3648.7	17.1
50°-60°	4268.2	20.0
60°-70°	4292.8	20.1
70°-80°	2717.4	12.7
80°-90°	338.6	1.6
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°	21336.0	100.0
0°-180°	21336.0	100.0

**Coefficient of Utilization**



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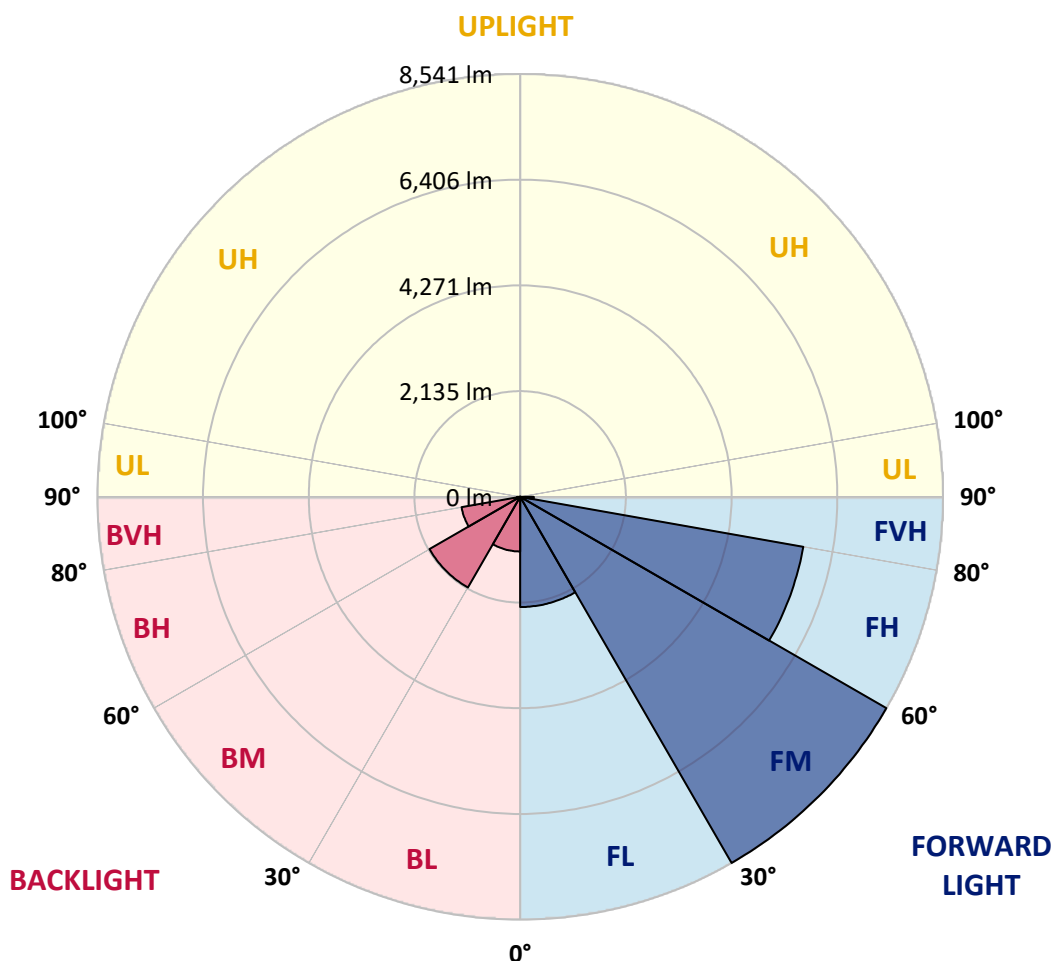
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2225.8	10.4			
FM (30°-60°)	8541.2	40.0			
FH (60°-80°)	5807.7	27.2			G3/7500
FVH (80°-90°)	274.6	1.3			G3/500
BL (0°-30°)	1104.6	5.2	B3/2500		
BM (30°-60°)	2115.6	9.9	B2/2500		
BH (60°-80°)	1202.5	5.6	B3/2500		G3/2500
BVH (80°-90°)	64.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8
2.5°	4091.7	4127.5	4100.1	4089.6	4098.0	4055.9	4022.1	3973.7	3950.5	3933.6	3906.2
5°	4299.3	4358.3	4322.5	4300.3	4297.2	4220.2	4174.9	4108.6	4056.9	4011.6	3942.1
7.5°	4518.5	4553.2	4539.5	4514.2	4497.4	4403.6	4323.5	4229.7	4172.8	4112.8	3995.8
10°	4710.2	4752.4	4738.7	4693.4	4677.6	4581.7	4490.0	4362.5	4284.5	4209.7	4048.5
12.5°	4908.3	4955.8	4927.3	4882.0	4868.3	4771.4	4676.5	4521.6	4424.7	4340.4	4117.0
15°	5090.6	5133.8	5113.8	5062.2	5048.5	4966.3	4862.0	4717.6	4612.2	4500.5	4213.9
17.5°	5236.1	5279.3	5254.0	5229.7	5225.5	5144.4	5082.2	4934.7	4834.6	4682.8	4362.5
20°	5342.5	5386.7	5374.1	5385.7	5429.9	5369.9	5332.0	5207.6	5105.4	4941.0	4576.4
22.5°	5426.8	5483.7	5534.3	5557.5	5639.6	5635.4	5627.0	5553.2	5473.2	5302.4	4831.4
25°	5435.2	5500.5	5600.7	5709.2	5858.8	5930.5	5983.2	5971.6	5877.8	5709.2	5184.4
27.5°	5447.9	5515.3	5618.6	5805.1	6072.7	6240.3	6327.7	6381.5	6326.7	6213.9	5585.9
30°	5420.5	5490.0	5619.6	5857.8	6219.2	6530.1	6686.0	6885.2	6891.5	6796.7	6191.8
32.5°	5296.1	5387.8	5544.8	5864.1	6361.5	6832.5	7072.7	7455.2	7538.5	7467.9	6816.7
35°	5088.5	5171.8	5396.2	5808.2	6447.9	7084.3	7523.7	8120.2	8243.4	8239.2	7552.2
37.5°	4858.8	4943.1	5196.0	5676.5	6503.7	7308.8	7921.0	8779.8	9025.3	8973.7	8246.6
40°	4604.9	4693.4	4985.3	5511.1	6476.3	7509.0	8341.4	9419.4	9724.0	9730.3	8910.5
42.5°	4309.8	4382.5	4675.5	5282.4	6385.7	7656.5	8732.4	10092.8	10413.1	10395.2	9536.4
45°	4027.4	4103.3	4359.3	4928.4	6176.0	7738.7	9115.9	10774.5	11125.4	11068.5	10231.9
47.5°	3686.0	3794.5	4086.4	4631.2	5852.5	7732.4	9451.0	11472.1	11866.2	11819.9	10832.5
50°	2836.7	2901.0	3561.7	4324.6	5414.1	7584.9	9778.8	12157.1	12655.5	12564.9	11473.2
52.5°	2555.3	2613.3	2826.1	3956.8	5015.8	7265.6	10051.7	12941.0	13314.1	13243.5	12127.6
55°	2415.2	2446.8	2576.4	3263.4	4627.0	6747.1	10234.0	13637.6	14025.3	13869.4	12739.8
57.5°	2239.2	2278.2	2428.9	2787.2	4148.6	5951.6	10191.8	14265.6	14623.9	14384.7	13279.3
60°	2104.3	2133.8	2275.0	2509.0	3654.4	5127.5	9760.8	14882.0	15062.2	14826.2	13816.7
62.5°	1990.5	2007.4	2106.4	2328.8	3278.2	4525.8	8920.0	14964.2	15299.3	15128.6	14217.1
65°	1849.3	1853.5	1970.5	2144.4	2930.5	4164.4	8198.1	14542.7	15181.3	15124.4	14361.5
67.5°	1683.9	1692.3	1810.3	1943.1	2512.1	3779.8	7073.8	14316.2	14722.9	14687.1	14075.9
70°	1476.3	1493.2	1601.7	1702.9	2127.5	3318.2	5630.2	13420.5	13903.1	13850.4	13134.9
72.5°	1276.1	1266.6	1367.8	1467.9	1772.4	2770.3	4267.7	11878.9	13041.2	12990.6	11912.6
75°	1048.5	1042.2	1146.5	1241.3	1453.1	2238.2	3002.1	8785.1	11458.4	11614.4	10271.9
77.5°	645.9	651.2	711.3	774.5	984.2	1672.3	1915.7	4887.3	7784.0	9230.8	8061.2
80°	467.9	467.9	512.1	550.1	651.2	1019.0	953.6	2037.9	2845.1	4455.2	5027.4
82.5°	303.5	290.8	318.2	350.9	362.5	441.5	436.3	1022.1	1450.0	1745.0	2093.8
85°	158.1	174.9	105.4	148.6	157.0	146.5	150.7	479.5	643.8	825.1	908.3
87.5°	24.2	19.0	25.3	34.8	40.0	33.7	29.5	55.8	86.4	114.9	135.9
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°	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8	3878.8
2.5°	3888.3	3883.1	3834.6	3764.0	3706.0	3657.5	3625.9	3604.9	3628.0	3585.9	3580.6
5°	3898.9	3863.0	3757.7	3656.5	3578.5	3474.2	3403.6	3356.2	3375.1	3338.3	3323.5
7.5°	3927.3	3862.0	3716.6	3555.3	3407.8	3296.1	3187.6	3083.3	3067.5	3044.3	3045.3
10°	3952.6	3858.8	3669.1	3458.4	3286.6	3089.6	2958.9	2851.4	2827.2	2799.8	2786.1
12.5°	3992.6	3866.2	3610.1	3355.1	3125.4	2897.8	2756.6	2630.1	2605.9	2552.2	2540.6
15°	4072.7	3892.5	3552.2	3227.6	2944.2	2714.4	2532.1	2421.5	2377.2	2317.2	2316.1
17.5°	4177.0	3969.5	3522.7	3107.5	2790.3	2533.2	2340.4	2228.7	2153.9	2118.0	2108.5
20°	4325.6	4069.6	3521.6	2999.0	2630.1	2339.3	2118.0	1991.6	1928.4	1898.8	1880.9
22.5°	4554.3	4217.1	3540.6	2923.1	2468.9	2151.7	1931.5	1757.6	1653.3	1572.2	1583.8
25°	4838.8	4438.4	3583.8	2853.5	2328.8	1972.6	1696.5	1455.2	1268.7	1187.6	1193.9
27.5°	5200.2	4702.9	3695.5	2782.9	2169.7	1779.8	1389.9	1083.3	942.0	847.2	854.6
30°	5662.8	5031.6	3842.0	2728.1	2022.1	1510.0	1046.4	798.7	674.4	596.4	589.0
32.5°	6216.0	5507.9	4002.1	2691.3	1860.9	1172.8	754.5	585.9	464.7	420.4	426.8
35°	6901.0	6043.2	4246.6	2637.5	1584.8	834.6	538.5	396.2	334.0	325.6	326.7
37.5°	7525.8	6591.2	4489.0	2546.9	1250.8	593.3	365.6	301.4	287.7	284.5	288.7
40°	8138.1	7090.7	4708.1	2415.2	859.9	406.7	268.7	271.9	260.3	251.8	247.6
42.5°	8711.3	7572.2	4879.9	2172.8	588.0	268.7	238.1	247.6	245.5	228.7	221.3
45°	9329.9	8081.2	4974.7	1833.5	369.9	228.7	213.9	230.8	241.3	222.3	213.9
47.5°	9857.8	8577.5	4970.5	1404.6	250.8	216.0	201.3	216.0	228.7	215.0	207.6
50°	10466.9	8988.4	4835.6	891.5	222.3	200.2	192.8	198.1	215.0	205.5	198.1
52.5°	11143.4	9551.1	4631.2	497.4	210.7	189.7	179.1	185.5	200.2	188.6	192.8
55°	11703.9	10018.0	4150.7	339.3	205.5	177.0	170.7	174.9	181.2	169.7	176.0
57.5°	12204.5	10403.6	3664.9	278.2	198.1	168.6	167.5	159.1	158.1	150.7	144.4
60°	12711.3	10708.2	3009.5	251.8	190.7	169.7	151.7	140.1	130.7	123.3	120.1
62.5°	13100.2	10918.9	2380.4	227.6	180.2	159.1	139.1	120.1	104.3	94.8	94.8
65°	13214.0	10825.1	1675.5	206.5	168.6	149.6	124.3	98.0	79.0	72.7	69.5
67.5°	12849.4	10286.7	1166.5	190.7	157.0	139.1	109.6	80.1	63.2	54.8	52.7
70°	11921.0	9385.7	688.1	168.6	142.3	121.2	100.1	65.3	51.6	43.2	41.1
72.5°	10549.0	8034.8	428.9	143.3	122.2	99.1	74.8	53.7	41.1	33.7	32.7
75°	8713.4	6263.5	280.3	110.6	96.9	78.0	56.9	43.2	35.8	28.5	26.3
77.5°	6987.4	4431.0	250.8	84.3	71.7	55.8	43.2	35.8	29.5	25.3	25.3
80°	4021.1	2529.0	205.5	58.0	44.3	42.1	33.7	29.5	27.4	24.2	23.2
82.5°	1975.8	1215.0	132.8	35.8	25.3	27.4	28.5	26.3	23.2	21.1	21.1
85°	680.7	404.6	53.7	23.2	16.9	16.9	17.9	19.0	17.9	16.9	16.9
87.5°	105.4	76.9	14.8	13.7	10.5	9.5	10.5	11.6	11.6	10.5	10.5
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)