

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: P509900

Luminaire Tested: **VERD-M-CA3-160-750-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509900
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-CA3-160-750-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1000mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21727 lumens
Efficiency: N/A
Efficacy: 133.5 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

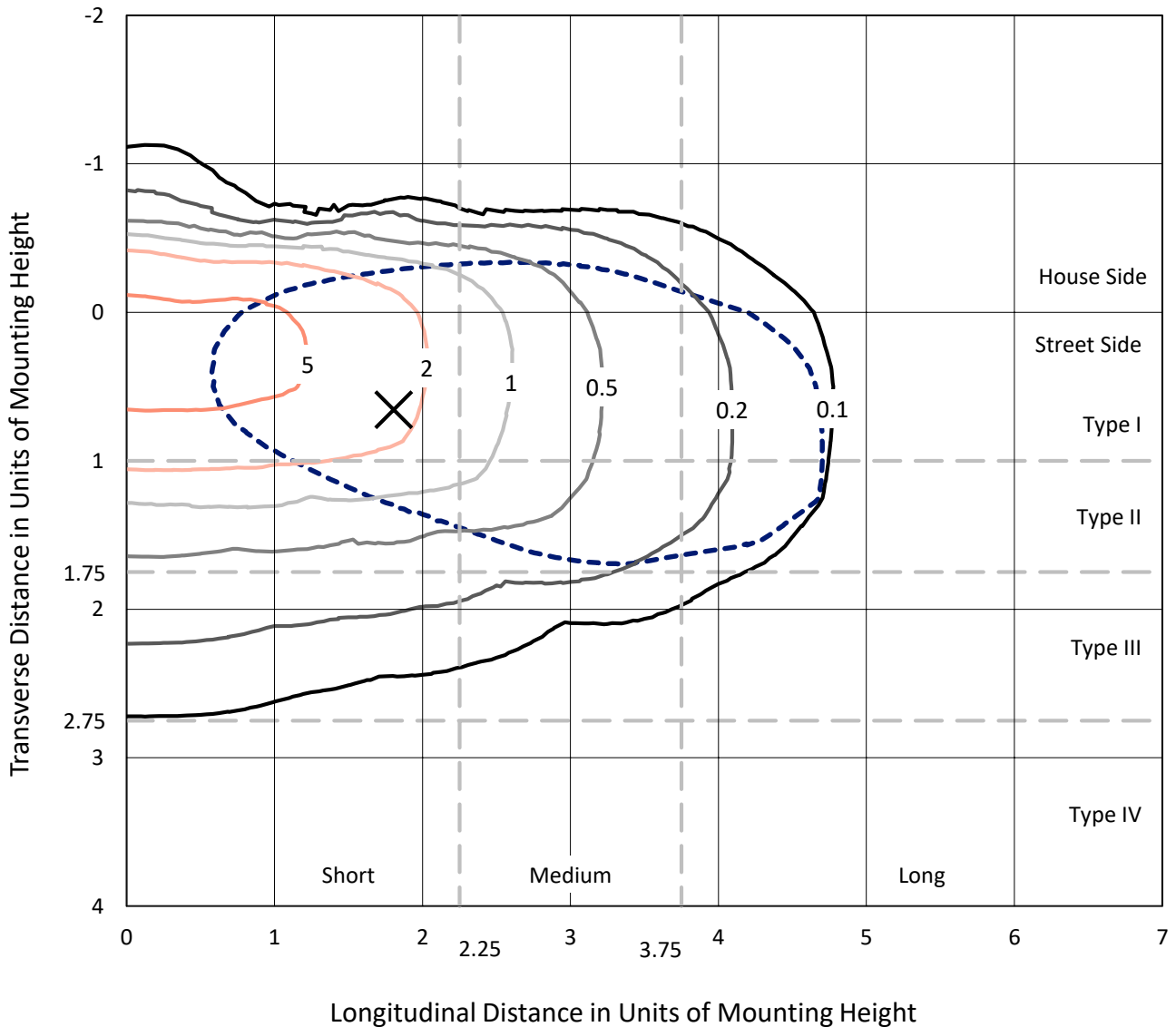
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

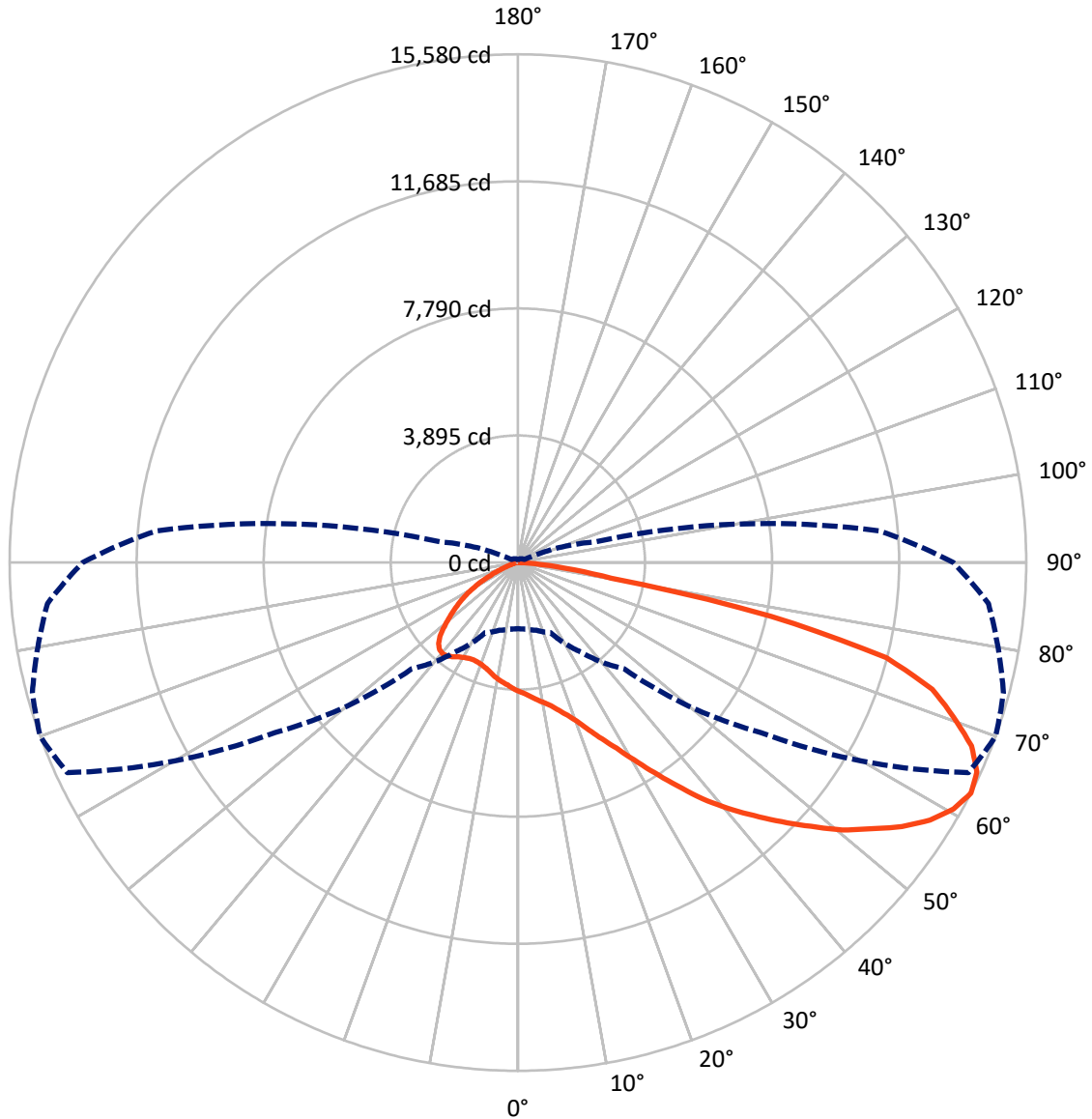
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 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
House Side	Lumens	4569.0	0.0	4569.0
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	17158.0	0.0	17158.0
	% Fixture	79.0	0.0	79.0
Total	Lumens	21727.0	0.0	21727.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.0	1.7
10°-20°	1119.2	5.2
20°-30°	1897.3	8.7
30°-40°	2790.1	12.8
40°-50°	3715.5	17.1
50°-60°	4346.4	20.0
60°-70°	4371.4	20.1
70°-80°	2767.2	12.7
80°-90°	344.8	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°	21727.0	100.0
0°-180°	21727.0	100.0

Coefficient of Utilization



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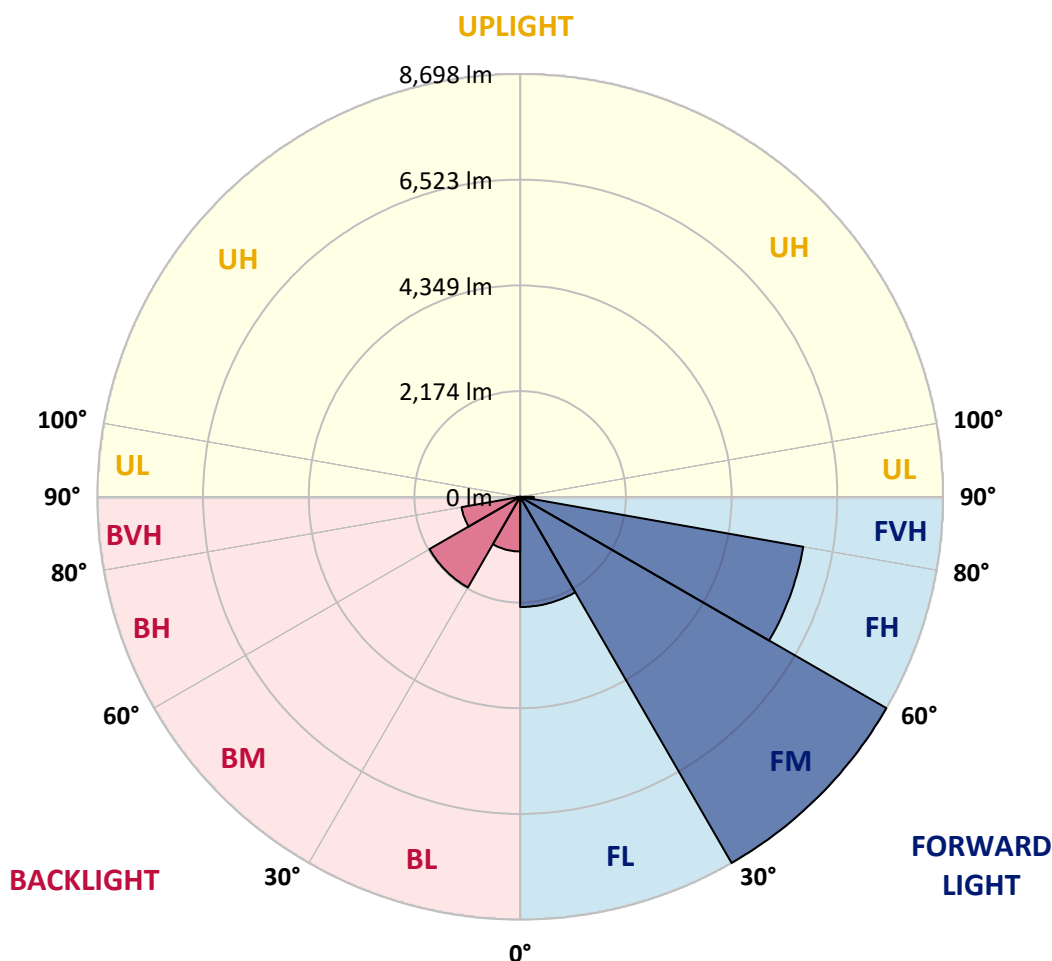
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2266.6	10.4			
FM (30°-60°)	8697.7	40.0			
FH (60°-80°)	5914.1	27.2			G3/7500
FVH (80°-90°)	279.6	1.3			G3/500
BL (0°-30°)	1124.9	5.2	B3/2500		
BM (30°-60°)	2154.3	9.9	B2/2500		
BH (60°-80°)	1224.6	5.6	B3/2500		G3/2500
BVH (80°-90°)	65.2	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°	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9
2.5°	4166.7	4203.2	4175.3	4164.5	4173.1	4130.2	4095.9	4046.5	4022.9	4005.7	3977.8
5°	4378.1	4438.2	4401.7	4379.1	4375.9	4297.6	4251.4	4183.8	4131.3	4085.1	4014.3
7.5°	4601.3	4636.7	4622.7	4597.0	4579.8	4484.3	4402.7	4307.2	4249.3	4188.1	4069.0
10°	4796.6	4839.5	4825.5	4779.4	4763.3	4665.6	4572.3	4442.5	4363.0	4286.9	4122.7
12.5°	4998.3	5046.6	5017.6	4971.5	4957.5	4858.8	4762.2	4604.5	4505.8	4419.9	4192.4
15°	5183.9	5227.9	5207.5	5155.0	5141.0	5057.3	4951.1	4804.1	4696.8	4583.0	4291.2
17.5°	5332.0	5376.0	5350.3	5325.6	5321.3	5238.7	5175.3	5025.1	4923.2	4768.7	4442.5
20°	5440.4	5485.5	5472.6	5484.4	5529.5	5468.3	5429.7	5303.0	5199.0	5031.6	4660.3
22.5°	5526.2	5584.2	5635.7	5659.3	5743.0	5738.7	5730.1	5655.0	5573.5	5399.6	4920.0
25°	5534.8	5601.4	5703.3	5813.8	5966.2	6039.2	6092.8	6081.0	5985.5	5813.8	5279.4
27.5°	5547.7	5616.4	5721.5	5911.5	6184.0	6354.6	6443.7	6498.4	6442.6	6327.8	5688.3
30°	5519.8	5590.6	5722.6	5965.1	6333.2	6649.7	6808.5	7011.3	7017.8	6921.2	6305.3
32.5°	5393.2	5486.5	5646.4	5971.6	6478.0	6957.7	7202.4	7591.9	7676.6	7604.7	6941.6
35°	5181.8	5266.6	5495.1	5914.7	6566.0	7214.2	7661.6	8269.0	8394.5	8390.2	7690.6
37.5°	4947.9	5033.7	5291.2	5780.6	6622.9	7442.7	8066.2	8940.7	9190.7	9138.1	8397.7
40°	4689.3	4779.4	5076.6	5612.1	6595.0	7646.6	8494.3	9592.0	9902.2	9908.6	9073.8
42.5°	4388.8	4462.8	4761.1	5379.2	6502.7	7796.8	8892.4	10277.7	10603.9	10585.7	9711.2
45°	4101.2	4178.5	4439.2	5018.7	6289.2	7880.5	9283.0	10972.0	11329.3	11271.4	10419.4
47.5°	3753.5	3864.1	4161.3	4716.1	5959.8	7874.1	9624.2	11682.4	12083.7	12036.5	11031.0
50°	2888.7	2954.1	3626.9	4403.8	5513.4	7723.9	9958.0	12379.8	12887.4	12795.1	11683.4
52.5°	2602.2	2661.2	2877.9	4029.3	5107.7	7398.7	10235.9	13178.2	13558.1	13486.2	12349.8
55°	2459.4	2491.6	2623.6	3323.3	4711.8	6870.8	10421.5	13887.5	14282.4	14123.6	12973.2
57.5°	2280.2	2319.9	2473.4	2838.2	4224.6	6060.6	10378.6	14527.0	14891.9	14648.3	13522.7
60°	2142.9	2172.9	2316.7	2554.9	3721.4	5221.5	9939.7	15154.8	15338.3	15097.9	14069.9
62.5°	2027.0	2044.2	2145.0	2371.5	3338.3	4608.8	9083.4	15238.5	15579.7	15405.9	14477.7
65°	1883.2	1887.5	2006.6	2183.7	2984.2	4240.7	8348.4	14809.2	15459.5	15401.6	14624.7
67.5°	1714.7	1723.3	1843.5	1978.7	2558.2	3849.1	7203.4	14578.5	14992.7	14956.3	14333.9
70°	1503.4	1520.5	1631.0	1734.1	2166.5	3379.1	5733.3	13666.4	14157.9	14104.2	13375.6
72.5°	1299.5	1289.8	1392.8	1494.8	1804.9	2821.1	4345.9	12096.6	13280.1	13228.6	12130.9
75°	1067.7	1061.3	1167.5	1264.1	1479.7	2279.2	3057.1	8946.1	11668.4	11827.2	10460.1
77.5°	657.8	663.1	724.3	788.7	1002.2	1702.9	1950.8	4976.8	7926.7	9400.0	8208.9
80°	476.4	476.4	521.5	560.1	663.1	1037.6	971.1	2075.3	2897.3	4536.9	5119.5
82.5°	309.0	296.2	324.1	357.3	369.1	449.6	444.2	1040.9	1476.5	1777.0	2132.2
85°	161.0	178.1	107.3	151.3	159.9	149.2	153.4	488.2	655.6	840.2	925.0
87.5°	24.7	19.3	25.8	35.4	40.8	34.3	30.0	56.9	88.0	117.0	138.4
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°	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9	3949.9
2.5°	3959.6	3954.2	3904.9	3833.0	3773.9	3724.6	3692.4	3670.9	3694.5	3651.6	3646.2
5°	3970.3	3933.8	3826.5	3723.5	3644.1	3537.9	3466.0	3417.7	3437.0	3399.4	3384.4
7.5°	3999.3	3932.8	3784.7	3620.5	3470.3	3356.5	3246.0	3139.8	3123.7	3100.1	3101.1
10°	4025.0	3929.5	3736.4	3521.8	3346.9	3146.2	3013.1	2903.7	2879.0	2851.1	2837.2
12.5°	4065.8	3937.0	3676.3	3416.6	3182.7	2950.9	2807.1	2678.3	2653.7	2598.9	2587.1
15°	4147.4	3963.9	3617.3	3286.8	2998.1	2764.2	2578.6	2465.9	2420.8	2359.7	2358.6
17.5°	4253.6	4042.2	3587.2	3164.4	2841.5	2579.6	2383.3	2269.5	2193.3	2156.8	2147.2
20°	4404.9	4144.1	3586.2	3053.9	2678.3	2382.2	2156.8	2028.1	1963.7	1933.6	1915.4
22.5°	4637.7	4294.4	3605.5	2976.7	2514.2	2191.2	1966.9	1789.9	1683.6	1601.0	1612.8
25°	4927.5	4519.7	3649.5	2905.8	2371.5	2008.8	1727.6	1481.9	1292.0	1209.3	1215.8
27.5°	5295.5	4789.0	3763.2	2833.9	2209.4	1812.4	1415.4	1103.1	959.3	862.7	870.2
30°	5766.6	5123.8	3912.4	2778.1	2059.2	1537.7	1065.5	813.4	686.8	607.3	599.8
32.5°	6330.0	5608.9	4075.5	2740.6	1895.0	1194.3	768.3	596.6	473.2	428.1	434.6
35°	7027.4	6154.0	4324.4	2685.9	1613.9	849.9	548.3	403.5	340.2	331.6	332.6
37.5°	7663.8	6712.0	4571.2	2593.6	1273.7	604.1	372.4	306.9	292.9	289.7	294.0
40°	8287.2	7220.6	4794.4	2459.4	875.6	414.2	273.6	276.8	265.0	256.5	252.2
42.5°	8871.0	7711.0	4969.3	2212.6	598.8	273.6	242.5	252.2	250.0	232.9	225.3
45°	9500.8	8229.3	5065.9	1867.1	376.6	232.9	217.8	235.0	245.7	226.4	217.8
47.5°	10038.4	8734.7	5061.6	1430.4	255.4	220.0	205.0	220.0	232.9	218.9	211.4
50°	10658.7	9153.2	4924.3	907.8	226.4	203.9	196.4	201.7	218.9	209.2	201.7
52.5°	11347.6	9726.2	4716.1	506.5	214.6	193.2	182.4	188.9	203.9	192.1	196.4
55°	11918.4	10201.5	4226.8	345.5	209.2	180.3	173.8	178.1	184.6	172.8	179.2
57.5°	12428.1	10594.3	3732.1	283.3	201.7	171.7	170.6	162.0	161.0	153.4	147.0
60°	12944.3	10904.4	3064.6	256.5	194.2	172.8	154.5	142.7	133.1	125.5	122.3
62.5°	13340.2	11119.0	2424.0	231.8	183.5	162.0	141.6	122.3	106.2	96.6	96.6
65°	13456.1	11023.5	1706.2	210.3	171.7	152.4	126.6	99.8	80.5	74.0	70.8
67.5°	13084.8	10475.2	1187.9	194.2	159.9	141.6	111.6	81.6	64.4	55.8	53.7
70°	12139.5	9557.7	700.7	171.7	144.9	123.4	101.9	66.5	52.6	44.0	41.8
72.5°	10742.4	8182.1	436.7	145.9	124.5	100.9	76.2	54.7	41.8	34.3	33.3
75°	8873.1	6378.2	285.4	112.7	98.7	79.4	57.9	44.0	36.5	29.0	26.8
77.5°	7115.4	4512.2	255.4	85.8	73.0	56.9	44.0	36.5	30.0	25.8	25.8
80°	4094.8	2575.3	209.2	59.0	45.1	42.9	34.3	30.0	27.9	24.7	23.6
82.5°	2012.0	1237.2	135.2	36.5	25.8	27.9	29.0	26.8	23.6	21.5	21.5
85°	693.2	412.1	54.7	23.6	17.2	17.2	18.2	19.3	18.2	17.2	17.2
87.5°	107.3	78.3	15.0	13.9	10.7	9.7	10.7	11.8	11.8	10.7	10.7
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)