

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: P510205

Luminaire Tested: **VERD-M-CA4-230-722-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510205  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-230-722-U-T2  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2200K, 1050mA LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26411 lumens  
Efficiency: N/A  
Efficacy: 113.2 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

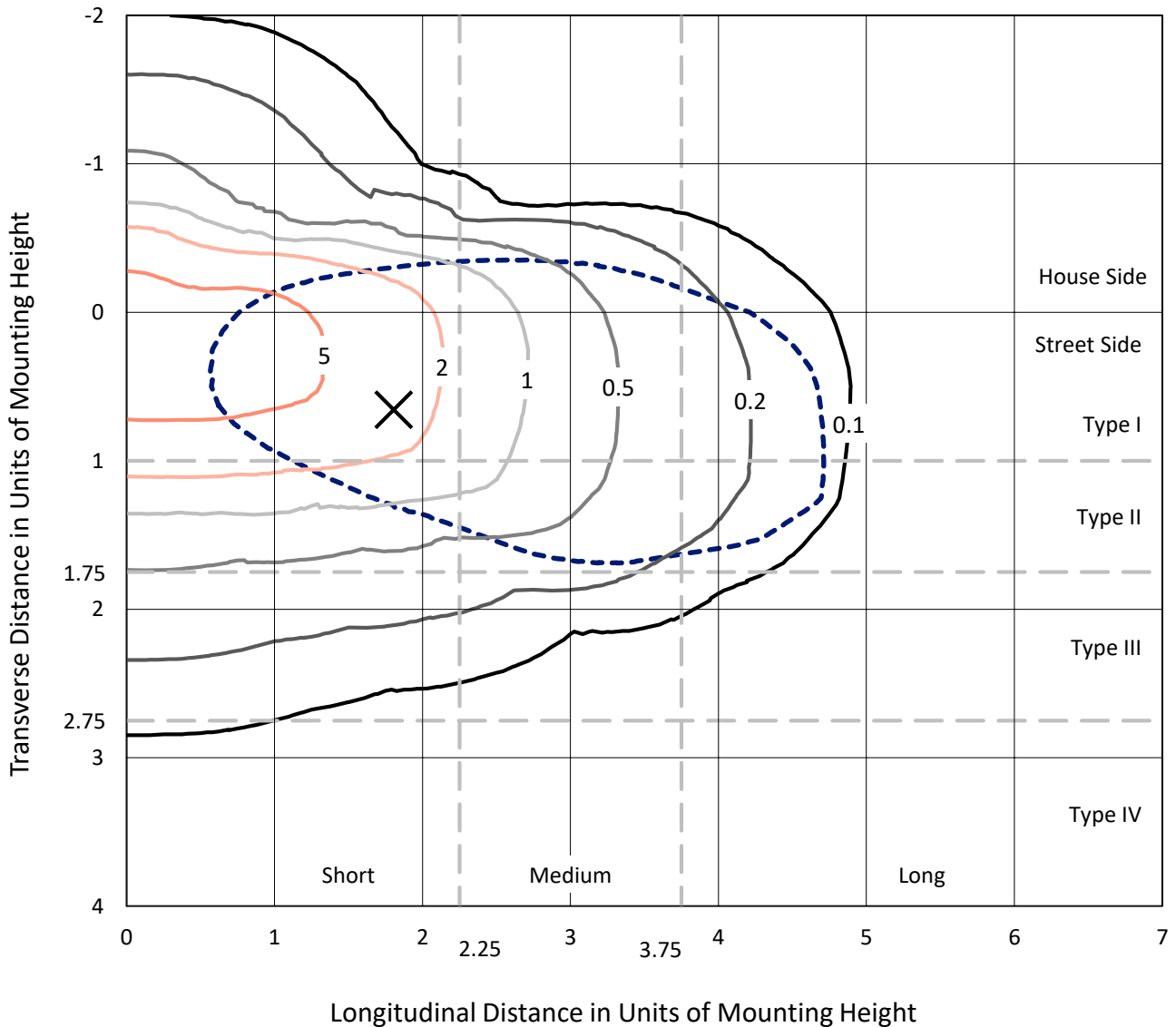
Input Watts (W): 233.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

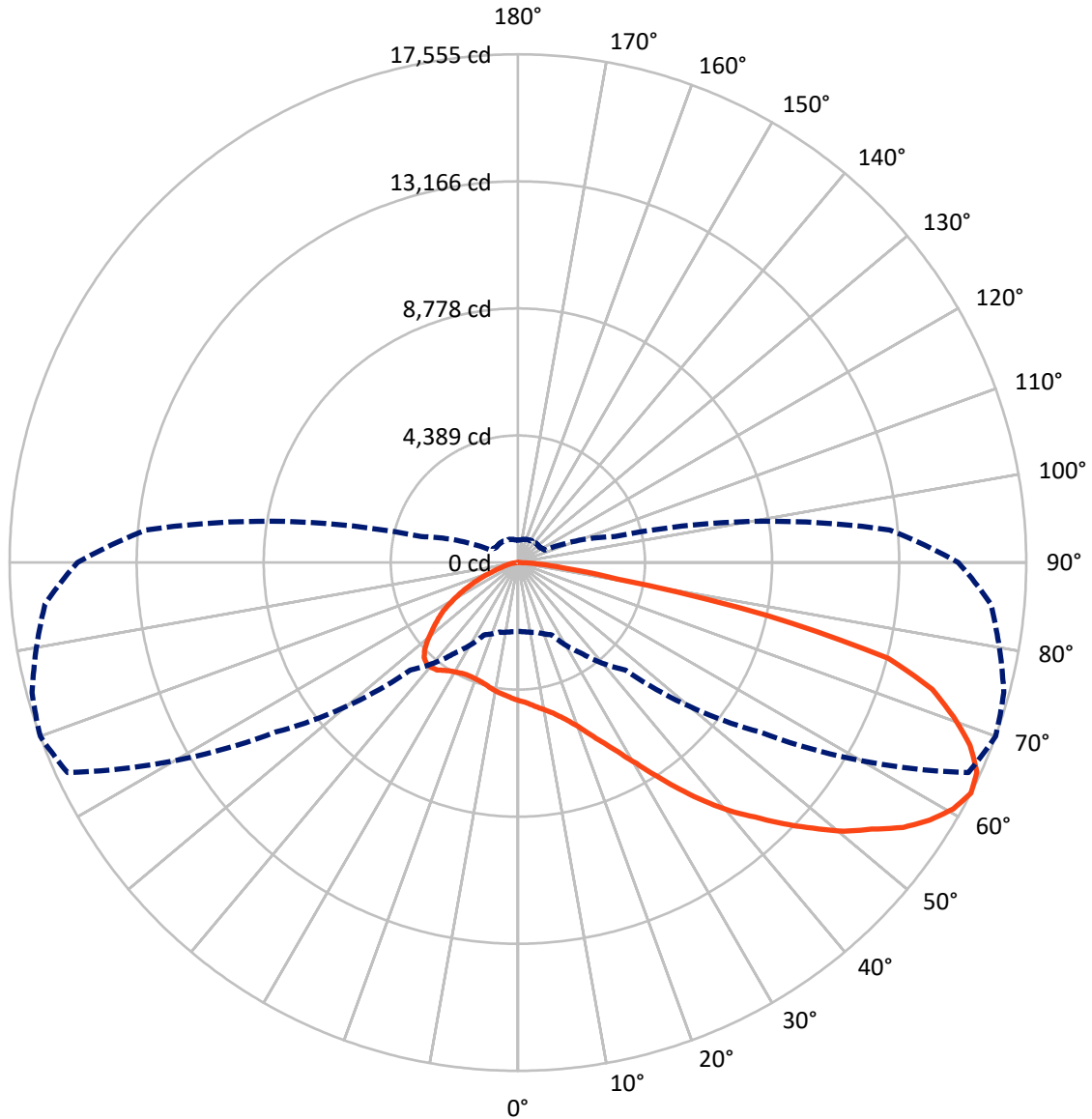
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 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	6837.9	0.0	6837.9
	% Fixture	25.9	0.0	25.9
<b>Street Side</b>	Lumens	19573.1	0.0	19573.1
	% Fixture	74.1	0.0	74.1
<b>Total</b>	Lumens	26411.0	0.0	26411.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	457.9	1.7
10°-20°	1390.4	5.3
20°-30°	2359.8	8.9
30°-40°	3414.5	12.9
40°-50°	4480.6	17.0
50°-60°	5235.5	19.8
60°-70°	5254.0	19.9
70°-80°	3347.9	12.7
80°-90°	470.5	1.8
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°	26411.0	100.0
0°-180°	26411.0	100.0



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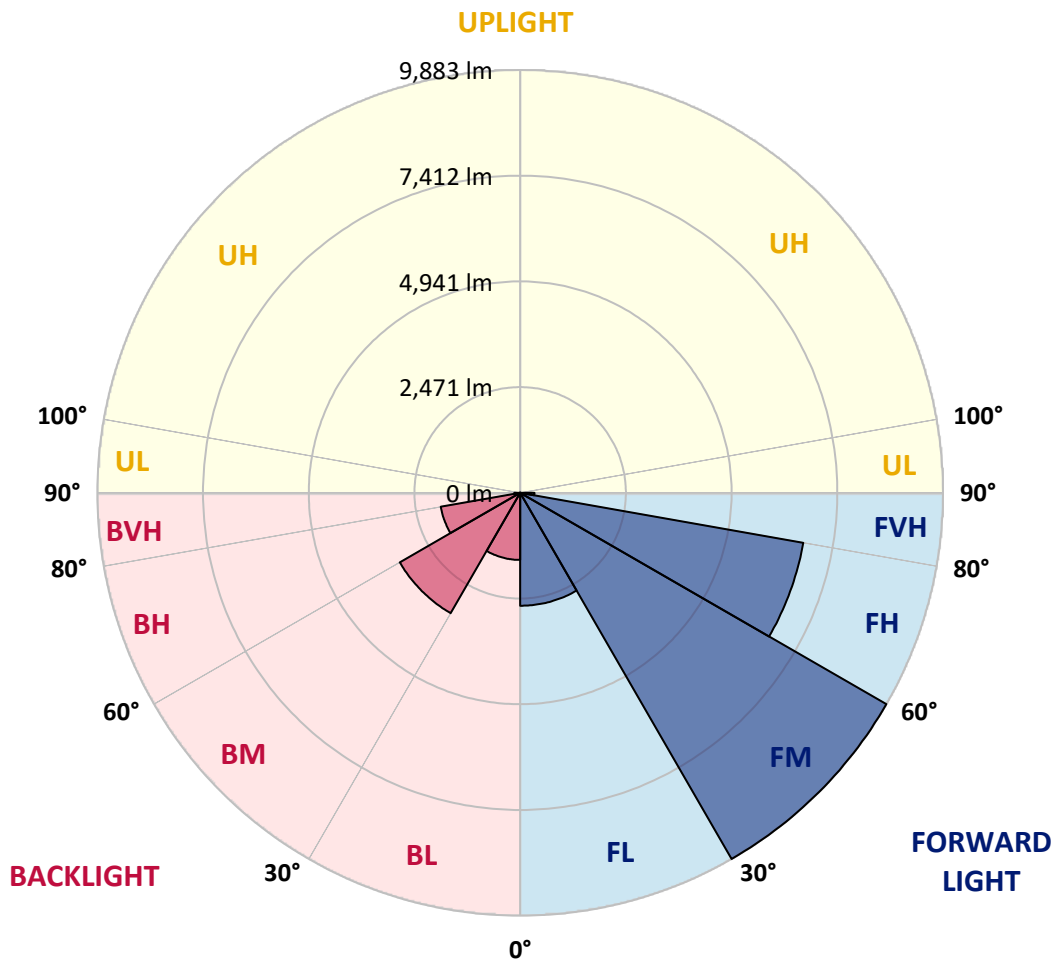
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2639.8	10.0			
FM (30°-60°)	9882.7	37.4			
FH (60°-80°)	6718.7	25.4			G3/7500
FVH (80°-90°)	331.9	1.3			G3/500
BL (0°-30°)	1568.3	5.9	B3/2500		
BM (30°-60°)	3247.8	12.3	B3/5000		
BH (60°-80°)	1883.2	7.1	B3/2500		G3/2500
BVH (80°-90°)	138.6	0.5			G2/225
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°	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8
2.5°	4949.4	5001.9	4994.8	4962.6	4985.2	4923.2	4900.5	4865.9	4830.1	4818.1	4797.9
5°	5183.4	5252.6	5239.4	5196.5	5195.3	5107.0	5056.8	4991.2	4936.3	4893.3	4830.1
7.5°	5401.8	5481.7	5469.8	5428.0	5425.6	5324.2	5220.3	5117.7	5054.5	4999.6	4883.8
10°	5633.3	5694.2	5683.4	5629.7	5619.0	5519.9	5398.2	5269.3	5176.2	5099.8	4935.1
12.5°	5846.9	5911.4	5916.2	5849.3	5832.6	5726.4	5620.2	5449.5	5329.0	5241.8	4999.6
15°	6046.2	6122.6	6108.3	6041.5	6023.6	5916.2	5812.3	5654.8	5529.5	5407.7	5104.6
17.5°	6206.2	6279.0	6261.1	6231.2	6221.7	6138.1	6052.2	5881.5	5770.6	5614.2	5266.9
20°	6316.0	6384.0	6391.2	6382.8	6437.7	6358.9	6311.2	6190.7	6068.9	5928.1	5488.9
22.5°	6358.9	6440.1	6509.3	6563.0	6676.4	6664.5	6656.1	6586.9	6467.6	6262.3	5782.5
25°	6372.1	6453.2	6560.6	6693.1	6896.0	6968.8	7021.3	7038.0	6908.0	6745.6	6147.7
27.5°	6374.5	6461.6	6571.4	6785.0	7094.1	7313.7	7439.1	7497.5	7424.7	7295.8	6644.2
30°	6324.3	6413.8	6554.7	6839.9	7249.3	7609.7	7817.4	8076.4	8045.4	7936.7	7266.0
32.5°	6179.9	6261.1	6455.6	6830.4	7403.3	7912.9	8236.3	8685.1	8790.1	8719.7	7983.3
35°	5920.9	6020.0	6271.8	6751.6	7486.8	8207.7	8729.2	9427.4	9617.2	9622.0	8862.9
37.5°	5659.6	5734.7	6030.7	6603.6	7533.3	8469.0	9197.1	10171.0	10446.7	10452.6	9594.5
40°	5381.5	5450.7	5776.5	6405.5	7485.6	8674.3	9632.7	10885.9	11280.9	11243.9	10313.0
42.5°	5021.0	5097.4	5420.9	6135.8	7366.3	8833.1	10075.5	11636.6	12016.1	12057.9	11062.5
45°	4713.1	4774.0	5056.8	5714.5	7147.8	8919.0	10490.8	12437.4	12871.8	12827.7	11862.2
47.5°	4333.6	4424.3	4726.2	5371.9	6755.2	8897.5	10888.3	13229.9	13713.3	13672.7	12555.6
50°	3343.0	3448.0	4149.8	5012.7	6253.9	8729.2	11248.7	13987.8	14588.1	14481.9	13289.6
52.5°	3036.3	3066.1	3345.4	4599.7	5759.8	8347.3	11513.7	14945.0	15300.6	15258.8	14033.1
55°	2848.9	2906.2	3033.9	3789.3	5315.8	7726.7	11697.4	15744.6	16145.6	15949.9	14706.3
57.5°	2684.2	2724.8	2876.3	3243.9	4805.0	6872.1	11643.7	16418.9	16777.0	16503.7	15363.9
60°	2508.7	2535.0	2686.6	2961.1	4253.6	5928.1	11098.3	17114.7	17273.5	17022.8	15920.0
62.5°	2372.7	2397.7	2488.4	2752.2	3824.0	5252.6	10205.6	17163.7	17555.1	17372.5	16392.7
65°	2198.4	2215.1	2328.5	2536.2	3425.3	4850.4	9419.1	16704.2	17419.1	17373.7	16574.1
67.5°	2006.3	2026.6	2134.0	2280.8	2915.7	4376.5	8103.8	16455.9	16843.8	16888.0	16233.9
70°	1780.7	1795.0	1906.0	2012.2	2494.4	3841.9	6442.5	15504.7	15957.0	15955.8	15183.6
72.5°	1537.2	1536.0	1645.8	1758.0	2089.8	3227.2	5043.7	13765.8	14962.9	14873.3	13689.4
75°	1267.5	1285.4	1391.6	1479.9	1738.9	2616.1	3512.5	9971.7	13209.6	13332.5	11814.4
77.5°	810.4	822.3	882.0	972.7	1216.2	1999.1	2291.5	5541.4	8819.9	10638.8	9299.7
80°	592.0	597.9	650.5	703.0	809.2	1217.4	1164.9	2408.5	3495.7	5222.7	5704.9
82.5°	403.4	404.6	446.4	458.3	464.3	549.0	552.6	1172.0	1664.9	1960.9	2519.5
85°	267.3	222.0	173.1	229.2	235.1	201.7	196.9	528.7	825.9	990.6	933.3
87.5°	59.7	58.5	68.0	69.2	66.8	57.3	47.7	81.2	124.1	122.9	157.5
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°	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8	4766.8
2.5°	4778.8	4772.8	4739.4	4669.0	4621.2	4572.3	4544.8	4528.1	4534.1	4506.6	4494.7
5°	4790.7	4760.9	4666.6	4583.0	4507.8	4423.1	4352.7	4343.1	4357.5	4332.4	4318.1
7.5°	4821.7	4758.5	4637.9	4494.7	4369.4	4289.4	4188.0	4136.7	4133.1	4108.0	4112.8
10°	4839.6	4757.3	4596.2	4423.1	4276.3	4134.3	4025.7	3968.4	3964.8	3929.0	3920.6
12.5°	4888.6	4770.4	4547.2	4336.0	4172.5	3982.7	3868.1	3815.6	3809.6	3759.5	3740.4
15°	4963.7	4800.2	4495.9	4234.5	4023.3	3845.4	3708.2	3637.8	3627.0	3568.6	3548.3
17.5°	5083.1	4885.0	4480.4	4142.6	3893.2	3698.6	3537.5	3461.1	3399.1	3366.9	3339.4
20°	5244.2	4990.0	4498.3	4056.7	3729.7	3505.3	3304.8	3204.5	3161.6	3109.1	3112.6
22.5°	5473.4	5154.7	4529.3	3989.9	3581.7	3298.8	3073.3	2961.1	2883.5	2839.3	2841.7
25°	5795.6	5403.0	4590.2	3926.6	3420.6	3073.3	2807.1	2650.8	2572.0	2543.3	2513.5
27.5°	6202.6	5700.1	4734.6	3849.0	3229.6	2817.8	2523.0	2340.4	2260.5	2217.5	2211.5
30°	6725.3	6090.4	4904.1	3791.7	3029.1	2499.2	2171.0	2026.6	1956.1	1895.3	1866.6
32.5°	7362.7	6641.8	5092.6	3734.4	2780.8	2142.3	1845.1	1734.1	1622.0	1544.4	1548.0
35°	8102.6	7242.1	5373.1	3661.6	2489.6	1809.3	1604.1	1460.8	1355.8	1304.5	1280.6
37.5°	8800.8	7858.0	5702.5	3587.6	2163.8	1593.3	1366.6	1234.1	1152.9	1113.5	1121.9
40°	9507.4	8492.9	5986.6	3406.2	1798.6	1397.6	1131.4	1056.2	1024.0	993.0	996.6
42.5°	10139.9	8999.0	6194.2	3204.5	1543.2	1173.2	964.3	981.1	1000.1	982.2	977.5
45°	10798.7	9590.9	6376.8	2860.8	1329.6	996.6	922.6	969.1	1010.9	1008.5	1002.5
47.5°	11459.9	10139.9	6394.7	2404.9	1135.0	936.9	921.4	956.0	1010.9	1020.4	1013.3
50°	12141.4	10715.2	6289.7	1867.8	1052.7	944.1	922.6	928.5	989.4	1000.1	996.6
52.5°	12896.9	11337.0	6030.7	1420.3	1020.4	956.0	926.2	917.8	952.4	971.5	975.1
55°	13591.5	11831.1	5545.0	1254.4	996.6	957.2	952.4	925.0	926.2	916.6	940.5
57.5°	14175.1	12302.6	4993.6	1163.7	975.1	946.4	964.3	913.0	898.7	859.3	849.8
60°	14779.1	12685.7	4217.8	1101.6	950.0	933.3	934.5	892.7	856.9	799.6	782.9
62.5°	15207.5	12888.6	3464.7	1028.8	915.4	913.0	895.1	864.1	831.9	781.7	774.6
65°	15331.6	12781.1	2661.5	952.4	870.1	879.6	847.4	804.4	670.7	608.7	608.7
67.5°	14921.1	12119.9	1970.5	864.1	815.2	834.3	771.0	633.7	564.5	527.5	533.5
70°	13795.6	11051.8	1283.0	735.2	736.4	751.9	636.1	570.5	504.8	482.2	494.1
72.5°	12291.8	9468.0	846.2	586.0	620.6	594.4	581.2	525.1	466.7	440.4	448.8
75°	10129.2	7476.1	587.2	460.7	402.2	507.2	516.8	441.6	396.2	481.0	500.1
77.5°	8002.4	5196.5	484.6	322.2	297.2	374.8	414.1	409.4	655.2	769.8	761.5
80°	4758.5	2992.1	395.0	223.2	210.1	241.1	325.8	470.2	734.0	551.4	525.1
82.5°	2157.8	1360.6	210.1	117.0	137.3	159.9	243.5	584.8	481.0	353.3	333.0
85°	842.6	444.0	83.5	51.3	47.7	59.7	111.0	281.7	193.3	156.3	156.3
87.5°	108.6	80.0	23.9	17.9	15.5	19.1	35.8	156.3	90.7	76.4	74.0
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)