

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: P157398

Luminaire Tested: **VST-E10-LED-E-U-5MQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157398
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33708)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E10-LED-E-U-5MQ-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (210) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26998.1 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 247.7
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: 28.75 FT

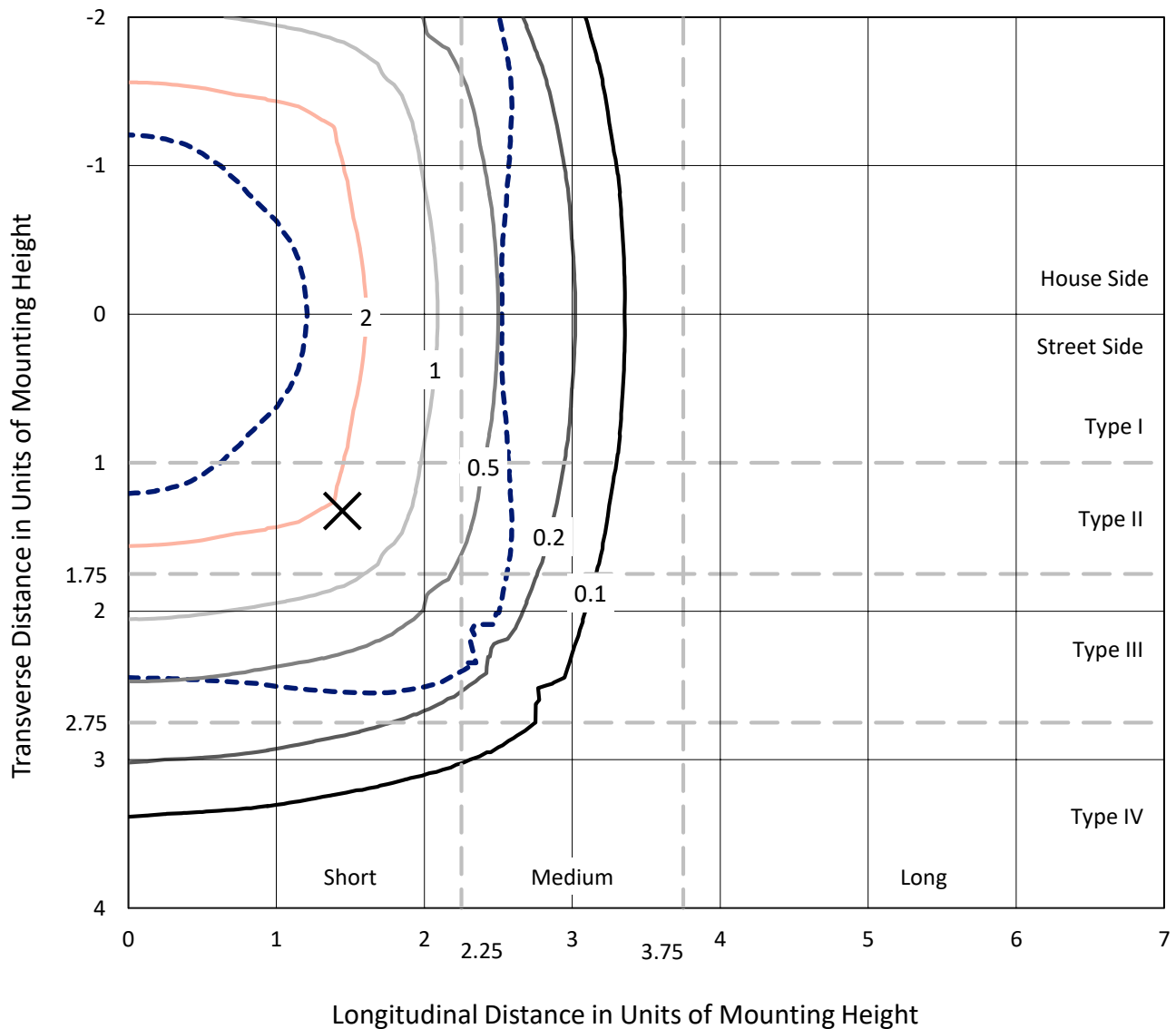


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

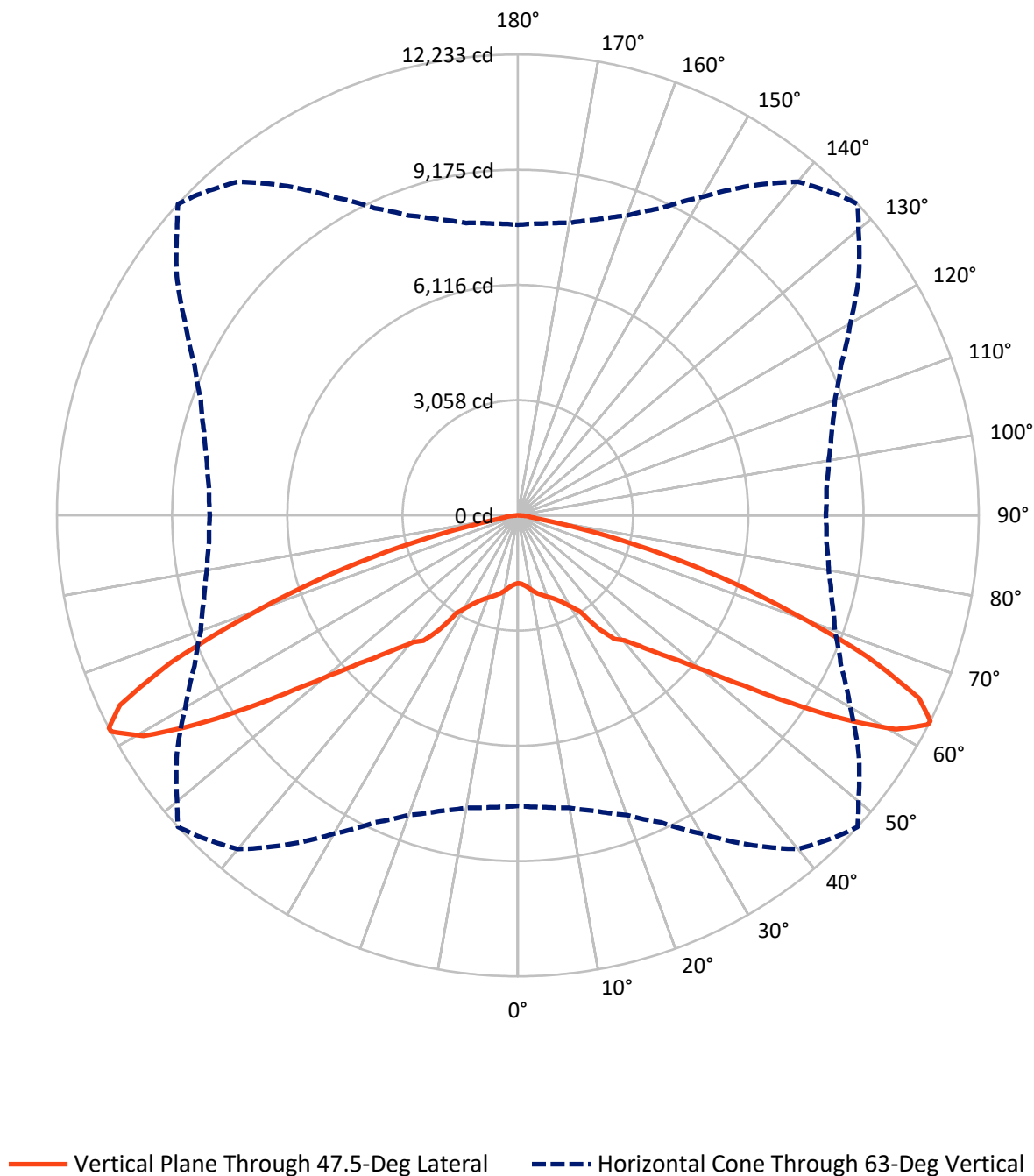


Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13499.0	0.0	13499.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	13499.0	0.0	13499.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	26998.1	0.0	26998.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	0.7
10°-20°	615.2	2.3
20°-30°	1176.8	4.4
30°-40°	2251.1	8.3
40°-50°	3895.2	14.4
50°-60°	6995.6	25.9
60°-70°	8506.7	31.5
70°-80°	3072.2	11.4
80°-90°	304.3	1.1
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°	26998.1	100.0
0°-180°	26998.1	100.0

Coefficient of Utilization



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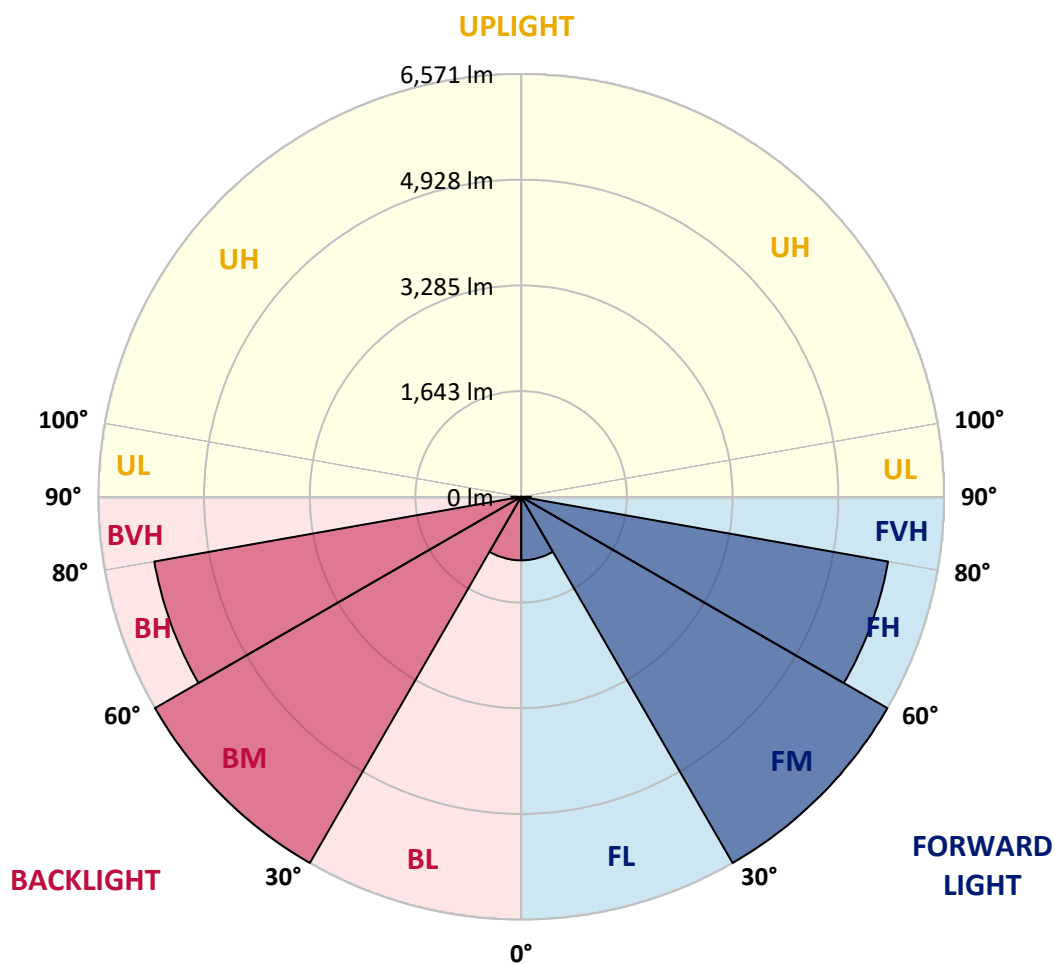
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	986.5	3.7			
FM	(30°-60°)	6570.9	24.3			
FH	(60°-80°)	5789.4	21.4			G3/7500
FVH	(80°-90°)	152.1	0.6			G2/225
BL	(0°-30°)	986.5	3.7	B2/1000		
BM	(30°-60°)	6570.9	24.3	B4/8500		
BH	(60°-80°)	5789.4	21.4	B5		G3/7500
BVH	(80°-90°)	152.1	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8
2.5°	1814.6	1811.2	1812.9	1814.6	1812.9	1811.2	1811.2	1811.2	1814.6	1811.2	1819.6
5°	1850.0	1846.7	1848.3	1848.3	1848.3	1845.0	1845.0	1845.0	1843.3	1845.0	1863.5
7.5°	1917.5	1912.5	1910.8	1914.2	1910.8	1909.1	1907.4	1907.4	1904.0	1904.0	1927.7
10°	1998.6	1991.8	1995.2	1996.9	1991.8	1988.4	1988.4	1988.4	1983.4	1981.7	2012.1
12.5°	2088.0	2084.7	2084.7	2081.3	2079.6	2076.2	2074.5	2076.2	2069.5	2069.5	2099.8
15°	2174.1	2167.4	2169.1	2164.0	2160.6	2157.2	2155.6	2153.9	2150.5	2150.5	2169.1
17.5°	2253.5	2248.4	2246.7	2241.6	2236.6	2231.5	2228.1	2226.4	2221.4	2221.4	2238.3
20°	2336.2	2331.1	2327.7	2319.3	2310.8	2305.8	2299.0	2295.7	2288.9	2290.6	2309.2
22.5°	2430.7	2422.3	2415.5	2408.8	2393.6	2383.4	2375.0	2368.2	2364.9	2364.9	2390.2
25°	2557.3	2552.2	2542.1	2520.2	2501.6	2486.4	2472.9	2466.1	2459.4	2456.0	2494.8
27.5°	2712.6	2707.5	2694.0	2672.1	2646.8	2621.4	2606.2	2594.4	2586.0	2580.9	2636.6
30°	2918.5	2910.1	2898.3	2862.8	2840.9	2802.0	2785.2	2768.3	2749.7	2754.8	2820.6
32.5°	3321.9	3310.1	3273.0	3234.2	3166.7	3114.3	3060.3	3019.8	2981.0	2975.9	3046.8
35°	3688.2	3683.2	3676.4	3649.4	3624.1	3592.0	3566.7	3524.5	3489.1	3480.6	3679.8
37.5°	3885.7	3897.6	3887.4	3884.0	3884.0	3899.2	3946.5	3993.8	4027.5	4047.8	4159.2
40°	4187.9	4187.9	4176.1	4169.3	4155.8	4176.1	4196.3	4231.8	4247.0	4248.7	4361.7
42.5°	4530.5	4532.2	4520.4	4500.2	4493.4	4512.0	4539.0	4572.7	4593.0	4598.1	4729.7
45°	4912.0	4907.0	4896.8	4890.1	4895.1	4912.0	4944.1	5009.9	5040.3	5063.9	5207.4
47.5°	5325.6	5359.3	5330.6	5335.7	5335.7	5388.0	5460.6	5514.6	5563.6	5609.2	5761.1
50°	5867.4	5872.5	5877.6	5892.7	5902.9	5972.1	6063.2	6127.4	6198.3	6257.3	6505.5
52.5°	6591.6	6581.4	6606.8	6623.6	6681.0	6718.2	6870.1	6951.1	7049.0	7125.0	7487.9
55°	7457.5	7452.4	7489.6	7503.1	7579.0	7670.2	7839.0	8016.2	8183.3	8276.2	8772.4
57.5°	8078.7	8092.2	8156.3	8245.8	8394.3	8588.5	8840.0	9231.6	9548.9	9650.2	10197.1
60°	8215.4	8259.3	8355.5	8534.4	8789.3	9150.5	9645.1	10244.4	10825.0	11019.1	11532.3
62.5°	7832.2	7882.9	8024.7	8239.0	8571.6	9106.7	9820.7	10666.4	11528.9	11961.0	12219.3
63°	7710.7	7773.2	7879.5	8127.6	8465.2	8993.6	9753.2	10664.7	11559.3	12030.2	12232.8
65°	7140.2	7152.0	7310.6	7558.8	7938.6	8487.2	9253.5	10306.8	11299.4	11842.9	11702.8
67.5°	6144.3	6193.2	6326.6	6576.4	6946.0	7516.6	8348.8	9322.7	10195.4	10629.2	10003.0
70°	4964.4	4961.0	5126.4	5327.3	5653.1	6154.4	6883.6	7763.0	8455.1	8770.8	7722.5
72.5°	3546.4	3458.7	3580.2	3803.0	4069.7	4469.8	5047.1	5730.7	6350.2	6623.6	5646.3
75°	1615.4	1591.8	1699.8	1920.9	2191.0	2547.2	3021.5	3612.3	4206.5	4527.2	3597.1
77.5°	543.5	550.3	592.5	671.8	817.0	995.9	1291.3	1669.4	2150.5	2467.8	1688.0
80°	364.6	374.7	388.2	400.1	416.9	443.9	508.1	606.0	754.5	913.2	533.4
82.5°	298.8	310.6	341.0	354.5	364.6	373.0	378.1	384.9	384.9	388.2	337.6
85°	214.4	234.6	275.1	300.5	310.6	317.3	325.8	335.9	320.7	307.2	261.6
87.5°	74.3	101.3	148.5	163.7	175.6	177.2	189.1	209.3	199.2	162.0	79.3
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8	1802.8
2.5°	1811.2	1809.5	1811.2	1812.9	1812.9	1812.9	1814.6	1816.3	1816.3
5°	1845.0	1846.7	1845.0	1846.7	1846.7	1848.3	1848.3	1851.7	1851.7
7.5°	1902.4	1905.7	1904.0	1907.4	1907.4	1910.8	1909.1	1914.2	1914.2
10°	1980.0	1983.4	1986.8	1988.4	1986.8	1990.1	1993.5	1995.2	1993.5
12.5°	2067.8	2069.5	2067.8	2071.2	2071.2	2074.5	2074.5	2079.6	2079.6
15°	2148.8	2147.1	2145.4	2150.5	2153.9	2155.6	2158.9	2164.0	2158.9
17.5°	2221.4	2223.1	2219.7	2224.8	2231.5	2236.6	2240.0	2246.7	2245.0
20°	2294.0	2290.6	2294.0	2302.4	2309.2	2315.9	2322.7	2332.8	2331.1
22.5°	2364.9	2368.2	2376.7	2383.4	2395.2	2405.4	2413.8	2427.3	2432.4
25°	2464.5	2464.5	2478.0	2486.4	2503.3	2516.8	2535.3	2550.5	2559.0
27.5°	2591.1	2591.1	2606.2	2624.8	2650.1	2673.8	2694.0	2714.3	2710.9
30°	2763.2	2771.7	2785.2	2808.8	2842.6	2871.3	2898.3	2918.5	2920.2
32.5°	2989.4	2999.5	3040.1	3100.8	3171.7	3225.7	3266.2	3315.2	3321.9
35°	3502.6	3527.9	3580.2	3629.2	3657.9	3689.9	3710.2	3711.9	3715.2
37.5°	4042.7	3998.8	3958.3	3921.2	3904.3	3900.9	3900.9	3907.7	3911.1
40°	4240.2	4218.3	4199.7	4176.1	4182.8	4181.1	4192.9	4203.1	4209.8
42.5°	4577.8	4560.9	4544.0	4513.7	4530.5	4525.5	4542.4	4557.6	4566.0
45°	5048.8	4996.4	4959.3	4910.3	4927.2	4917.1	4917.1	4935.7	4939.0
47.5°	5568.7	5507.9	5431.9	5371.2	5350.9	5332.3	5349.2	5349.2	5330.6
50°	6191.5	6118.9	6029.5	5931.6	5897.8	5879.2	5886.0	5894.4	5842.1
52.5°	7037.2	6956.2	6829.6	6681.0	6649.0	6633.8	6630.4	6618.6	6605.1
55°	8183.3	8031.4	7876.1	7680.3	7621.2	7604.4	7606.0	7592.5	7624.6
57.5°	9535.4	9312.6	8954.7	8716.7	8574.9	8520.9	8472.0	8451.7	8453.4
60°	10874.0	10419.9	9884.8	9469.6	9172.5	8983.4	8834.9	8752.2	8728.6
62.5°	11736.5	11022.5	10219.0	9545.5	9057.7	8745.4	8510.8	8362.3	8315.0
63°	11804.1	11047.8	10188.7	9466.2	8953.1	8625.6	8379.1	8225.5	8174.9
65°	11657.2	10793.0	9792.0	8931.1	8369.0	8006.1	7739.4	7594.2	7555.4
67.5°	10516.1	9797.0	8777.5	7887.9	7320.8	6952.8	6647.3	6508.9	6465.0
70°	8554.7	8061.8	7226.3	6466.7	5938.3	5583.8	5274.9	5160.2	5158.5
72.5°	6341.7	5702.0	5204.0	4647.0	4186.2	3904.3	3635.9	3507.6	3443.5
75°	4194.6	3509.3	2952.3	2483.0	2023.9	1770.7	1468.5	1338.6	1262.6
77.5°	2113.4	1566.4	1122.5	778.2	604.3	496.3	454.1	432.1	430.4
80°	703.9	528.3	454.1	425.4	416.9	418.6	413.6	405.1	395.0
82.5°	389.9	410.2	413.6	401.7	401.7	395.0	388.2	356.2	339.3
85°	334.2	368.0	371.4	364.6	362.9	352.8	341.0	297.1	271.8
87.5°	209.3	241.4	236.3	211.0	232.9	217.7	205.9	133.4	97.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)