

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: P157405

Luminaire Tested: **VST-F10-LED-E-U-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157405
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-F10-LED-E-U-5MQ
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (70) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26407.4 lumens
Efficiency: N/A
Efficacy: 102.1 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): 258.7
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

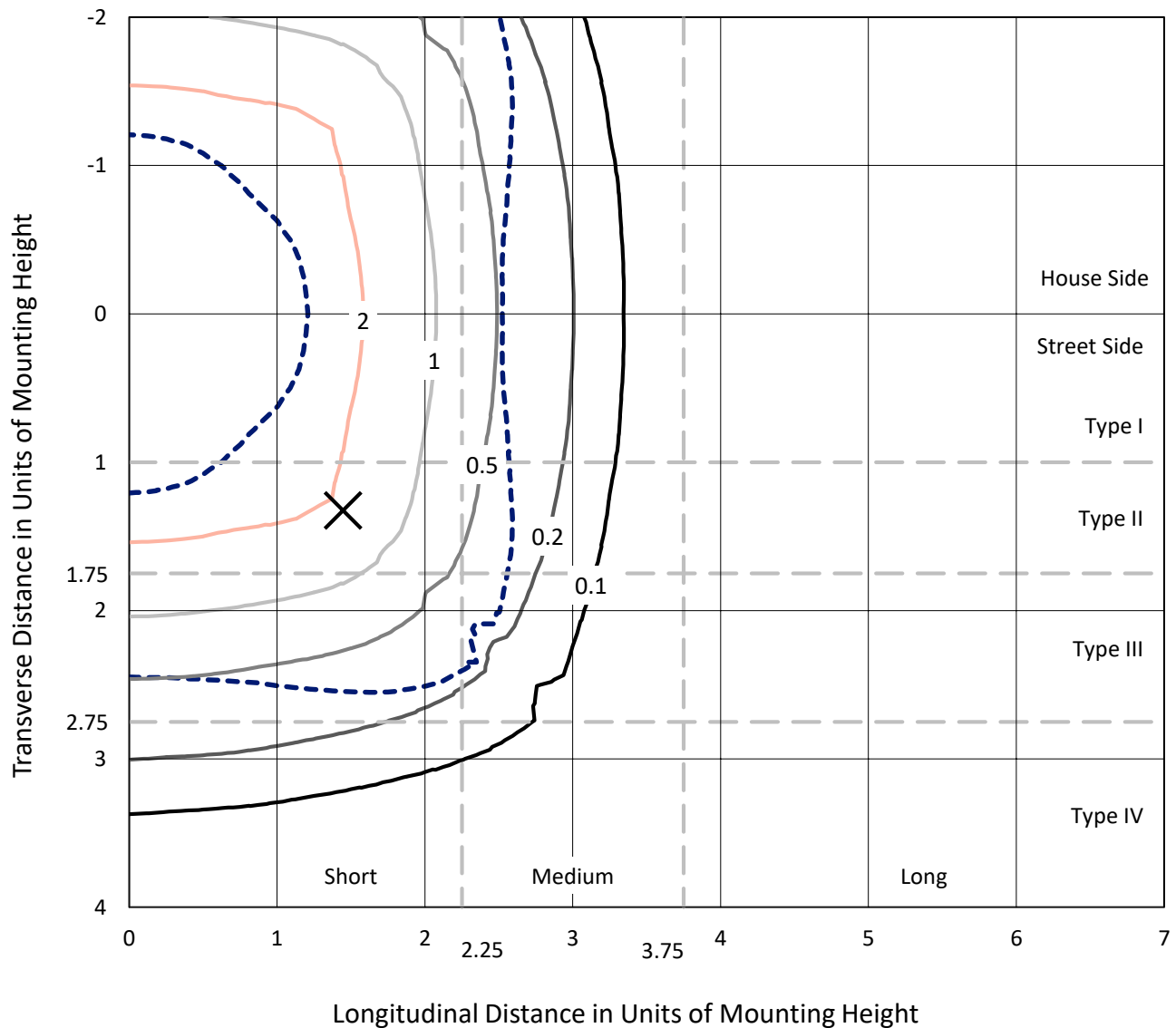


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

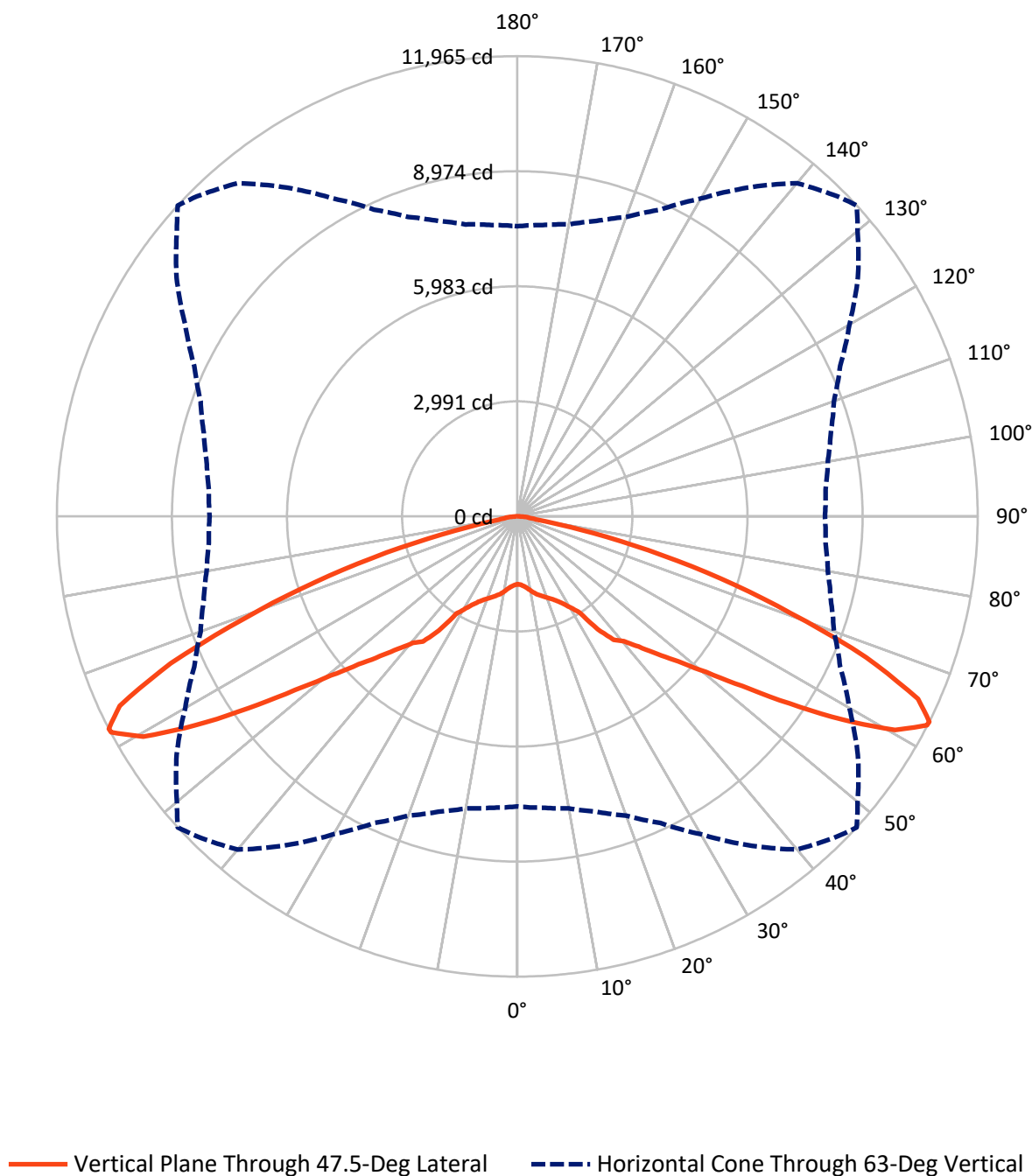


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13203.7	0.0	13203.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	13203.7	0.0	13203.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	26407.4	0.0	26407.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.0	0.7
10°-20°	601.8	2.3
20°-30°	1151.1	4.4
30°-40°	2201.9	8.3
40°-50°	3810.0	14.4
50°-60°	6842.5	25.9
60°-70°	8320.6	31.5
70°-80°	3005.0	11.4
80°-90°	297.6	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°	26407.4	100.0
0°-180°	26407.4	100.0

Coefficient of Utilization



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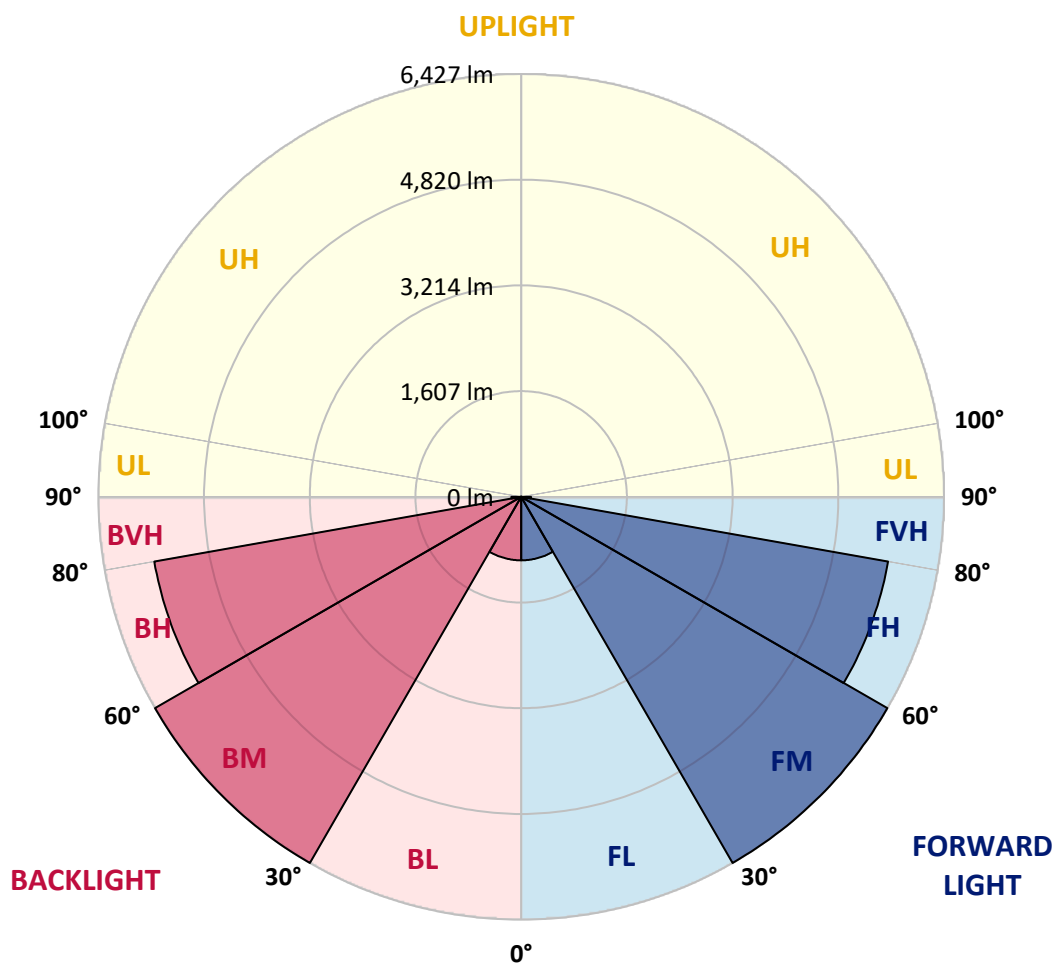
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	964.9	3.7			
FM	(30°-60°)	6427.2	24.3			
FH	(60°-80°)	5662.8	21.4			G3/7500
FVH	(80°-90°)	148.8	0.6			G2/225
BL	(0°-30°)	964.9	3.7	B2/1000		
BM	(30°-60°)	6427.2	24.3	B4/8500		
BH	(60°-80°)	5662.8	21.4	B5		G3/7500
BVH	(80°-90°)	148.8	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°	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3
2.5°	1774.9	1771.6	1773.2	1774.9	1773.2	1771.6	1771.6	1771.6	1774.9	1771.6	1779.8
5°	1809.6	1806.2	1807.9	1807.9	1807.9	1804.6	1804.6	1804.6	1802.9	1804.6	1822.8
7.5°	1875.6	1870.6	1869.0	1872.3	1869.0	1867.3	1865.7	1865.7	1862.4	1862.4	1885.5
10°	1954.8	1948.2	1951.5	1953.2	1948.2	1944.9	1944.9	1944.9	1940.0	1938.3	1968.1
12.5°	2042.3	2039.0	2039.0	2035.7	2034.1	2030.8	2029.1	2030.8	2024.2	2024.2	2053.9
15°	2126.6	2119.9	2121.6	2116.6	2113.3	2110.0	2108.4	2106.7	2103.4	2103.4	2121.6
17.5°	2204.2	2199.2	2197.5	2192.6	2187.6	2182.7	2179.4	2177.7	2172.8	2172.8	2189.3
20°	2285.1	2280.1	2276.8	2268.5	2260.3	2255.3	2248.7	2245.4	2238.8	2240.5	2258.6
22.5°	2377.5	2369.3	2362.7	2356.0	2341.2	2331.3	2323.0	2316.4	2313.1	2313.1	2337.9
25°	2501.3	2496.4	2486.5	2465.0	2446.9	2432.0	2418.8	2412.2	2405.6	2402.3	2440.3
27.5°	2653.2	2648.3	2635.1	2613.6	2588.8	2564.1	2549.2	2537.7	2529.4	2524.5	2578.9
30°	2854.7	2846.4	2834.9	2800.2	2778.7	2740.7	2724.2	2707.7	2689.6	2694.5	2758.9
32.5°	3249.3	3237.7	3201.4	3163.4	3097.4	3046.2	2993.4	2953.7	2915.8	2910.8	2980.1
35°	3607.5	3602.6	3596.0	3569.6	3544.8	3513.4	3488.7	3447.4	3412.7	3404.5	3599.3
37.5°	3800.7	3812.3	3802.4	3799.1	3799.1	3813.9	3860.2	3906.4	3939.4	3959.2	4068.2
40°	4096.3	4096.3	4084.7	4078.1	4064.9	4084.7	4104.5	4139.2	4154.0	4155.7	4266.3
42.5°	4431.4	4433.1	4421.5	4401.7	4395.1	4413.3	4439.7	4472.7	4492.5	4497.5	4626.2
45°	4804.6	4799.6	4789.7	4783.1	4788.0	4804.6	4835.9	4900.3	4930.0	4953.1	5093.5
47.5°	5209.1	5242.1	5214.0	5219.0	5219.0	5270.2	5341.1	5394.0	5441.9	5486.4	5635.0
50°	5739.0	5744.0	5749.0	5763.8	5773.7	5841.4	5930.6	5993.3	6062.7	6120.4	6363.1
52.5°	6447.3	6437.4	6462.2	6478.7	6534.9	6571.2	6719.8	6799.0	6894.8	6969.1	7324.1
55°	7294.3	7289.4	7325.7	7338.9	7413.2	7502.4	7667.5	7840.8	8004.3	8095.1	8580.5
57.5°	7901.9	7915.1	7977.9	8065.4	8210.7	8400.5	8646.5	9029.6	9340.0	9439.1	9974.0
60°	8035.7	8078.6	8172.7	8347.7	8597.0	8950.3	9434.1	10020.2	10588.2	10778.1	11280.0
62.5°	7660.9	7710.4	7849.1	8058.8	8384.0	8907.4	9605.8	10433.0	11276.7	11699.3	11951.9
63°	7542.0	7603.1	7707.1	7949.8	8280.0	8796.8	9539.8	10431.3	11306.4	11767.0	11965.2
65°	6983.9	6995.5	7150.7	7393.4	7764.9	8301.5	9051.1	10081.3	11052.1	11583.8	11446.7
67.5°	6009.8	6057.7	6188.1	6432.5	6794.1	7352.1	8166.1	9118.7	9972.3	10396.7	9784.1
70°	4855.7	4852.4	5014.2	5210.7	5529.4	6019.7	6733.0	7593.2	8270.1	8578.9	7553.6
72.5°	3468.9	3383.0	3501.9	3719.8	3980.7	4372.0	4936.6	5605.3	6211.2	6478.7	5522.8
75°	1580.1	1556.9	1662.6	1878.9	2143.1	2491.4	2955.4	3533.2	4114.4	4428.1	3518.4
77.5°	531.6	538.2	579.5	657.1	799.1	974.1	1263.1	1632.9	2103.4	2413.8	1651.0
80°	356.6	366.5	379.7	391.3	407.8	434.2	497.0	592.7	738.0	893.2	521.7
82.5°	292.2	303.8	333.5	346.7	356.6	364.9	369.8	376.4	376.4	379.7	330.2
85°	209.7	229.5	269.1	293.9	303.8	310.4	318.7	328.6	313.7	300.5	255.9
87.5°	72.6	99.1	145.3	160.2	171.7	173.4	184.9	204.7	194.8	158.5	77.6
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°	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3	1763.3
2.5°	1771.6	1769.9	1771.6	1773.2	1773.2	1773.2	1774.9	1776.5	1776.5
5°	1804.6	1806.2	1804.6	1806.2	1806.2	1807.9	1807.9	1811.2	1811.2
7.5°	1860.7	1864.0	1862.4	1865.7	1865.7	1869.0	1867.3	1872.3	1872.3
10°	1936.7	1940.0	1943.3	1944.9	1943.3	1946.6	1949.9	1951.5	1949.9
12.5°	2022.5	2024.2	2022.5	2025.8	2025.8	2029.1	2029.1	2034.1	2034.1
15°	2101.8	2100.1	2098.5	2103.4	2106.7	2108.4	2111.7	2116.6	2111.7
17.5°	2172.8	2174.4	2171.1	2176.1	2182.7	2187.6	2190.9	2197.5	2195.9
20°	2243.8	2240.5	2243.8	2252.0	2258.6	2265.2	2271.8	2281.8	2280.1
22.5°	2313.1	2316.4	2324.7	2331.3	2342.8	2352.7	2361.0	2374.2	2379.2
25°	2410.5	2410.5	2423.7	2432.0	2448.5	2461.7	2479.9	2494.7	2503.0
27.5°	2534.4	2534.4	2549.2	2567.4	2592.1	2615.3	2635.1	2654.9	2651.6
30°	2702.8	2711.0	2724.2	2747.3	2780.4	2808.4	2834.9	2854.7	2856.3
32.5°	2924.0	2933.9	2973.5	3033.0	3102.3	3155.2	3194.8	3242.7	3249.3
35°	3425.9	3450.7	3501.9	3549.8	3577.8	3609.2	3629.0	3630.7	3634.0
37.5°	3954.3	3911.3	3871.7	3835.4	3818.9	3815.6	3815.6	3822.2	3825.5
40°	4147.4	4126.0	4107.8	4084.7	4091.3	4089.7	4101.2	4111.1	4117.7
42.5°	4477.6	4461.1	4444.6	4414.9	4431.4	4426.5	4443.0	4457.8	4466.1
45°	4938.3	4887.1	4850.8	4802.9	4819.4	4809.5	4809.5	4827.7	4831.0
47.5°	5446.8	5387.4	5313.1	5253.6	5233.8	5215.7	5232.2	5232.2	5214.0
50°	6056.1	5985.1	5897.6	5801.8	5768.8	5750.6	5757.2	5765.5	5714.3
52.5°	6883.2	6804.0	6680.1	6534.9	6503.5	6488.6	6485.3	6473.8	6460.6
55°	8004.3	7855.7	7703.8	7512.3	7454.5	7438.0	7439.6	7426.4	7457.8
57.5°	9326.8	9108.8	8758.8	8526.0	8387.3	8334.5	8286.6	8266.8	8268.5
60°	10636.1	10191.9	9668.5	9262.4	8971.8	8786.9	8641.6	8560.7	8537.6
62.5°	11479.7	10781.4	9995.5	9336.7	8859.5	8554.1	8324.6	8179.3	8133.1
63°	11545.8	10806.1	9965.7	9259.1	8757.2	8436.9	8195.8	8045.6	7996.0
65°	11402.2	10556.8	9577.7	8735.7	8185.9	7830.9	7570.1	7428.1	7390.1
67.5°	10286.0	9582.7	8585.5	7715.4	7160.6	6800.7	6501.8	6366.4	6323.5
70°	8367.5	7885.4	7068.1	6325.2	5808.4	5461.7	5159.5	5047.3	5045.6
72.5°	6203.0	5577.2	5090.2	4545.3	4094.6	3818.9	3556.4	3430.9	3368.1
75°	4102.9	3432.5	2887.7	2428.7	1979.6	1732.0	1436.4	1309.3	1235.0
77.5°	2067.1	1532.2	1097.9	761.1	591.1	485.4	444.1	422.7	421.0
80°	688.5	516.8	444.1	416.1	407.8	409.5	404.5	396.3	386.3
82.5°	381.4	401.2	404.5	392.9	392.9	386.3	379.7	348.4	331.9
85°	326.9	359.9	363.2	356.6	355.0	345.1	333.5	290.6	265.8
87.5°	204.7	236.1	231.1	206.4	227.8	213.0	201.4	130.4	95.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)