

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: P157351

Luminaire Tested: **VST-E05-LED-E-U-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157351
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-E05-LED-E-U-5MQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (105) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16411.8 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 127.3
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: 28.75 FT

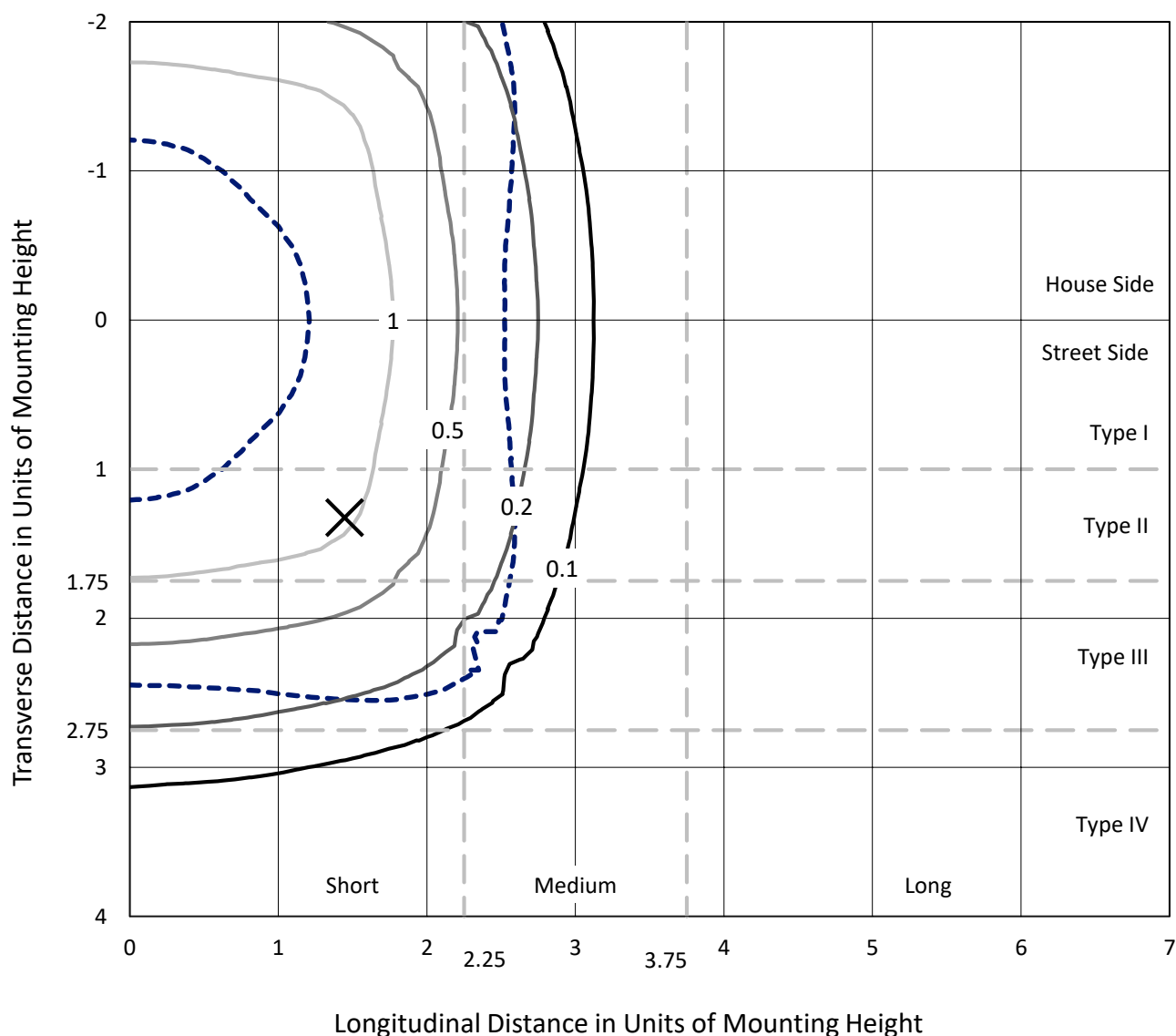


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

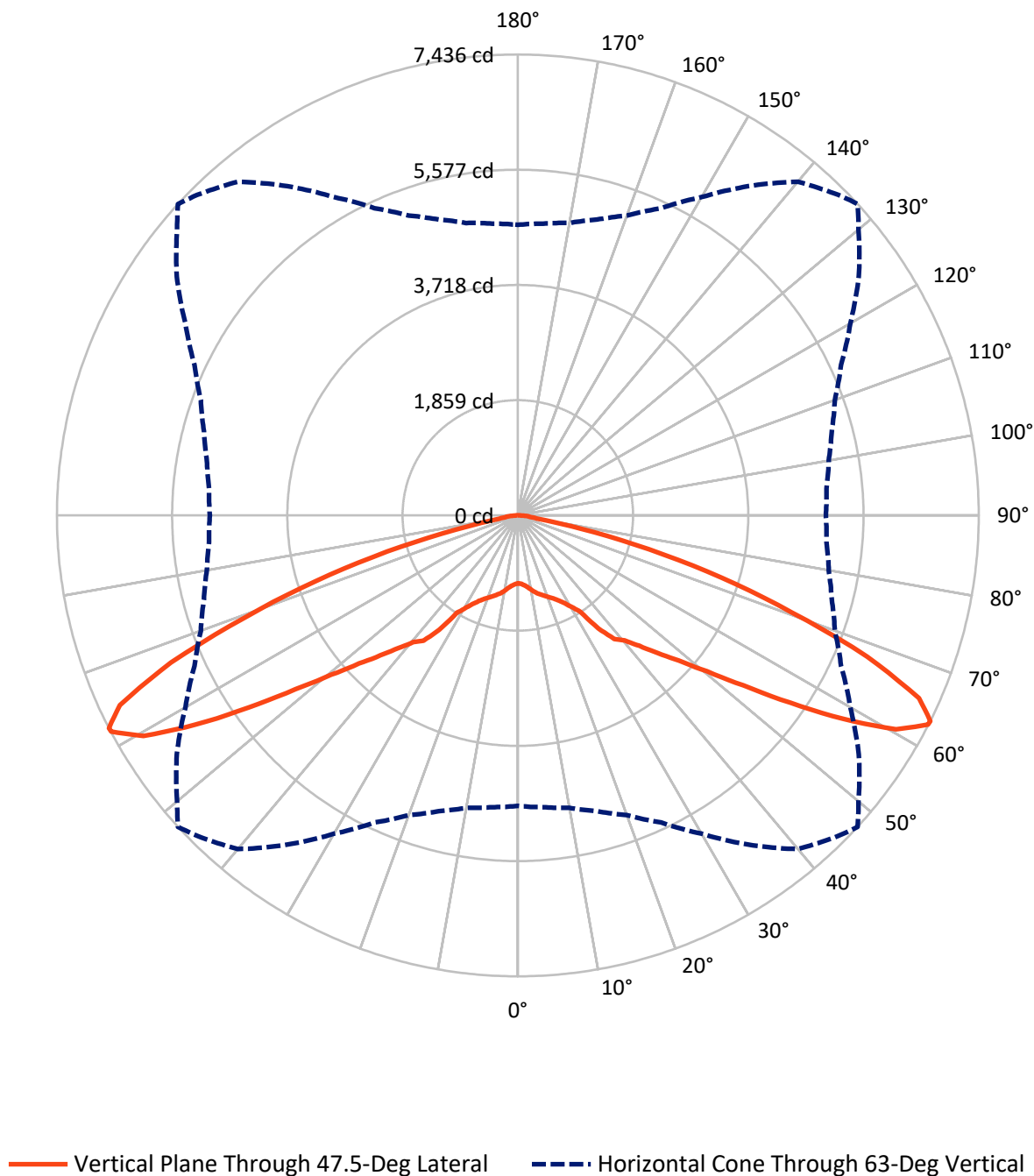


Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8205.9	0.0	8205.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8205.9	0.0	8205.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	16411.8	0.0	16411.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	0.7
10°-20°	374.0	2.3
20°-30°	715.4	4.4
30°-40°	1368.4	8.3
40°-50°	2367.8	14.4
50°-60°	4252.5	25.9
60°-70°	5171.1	31.5
70°-80°	1867.6	11.4
80°-90°	185.0	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°	16411.8	100.0
0°-180°	16411.8	100.0

Coefficient of Utilization



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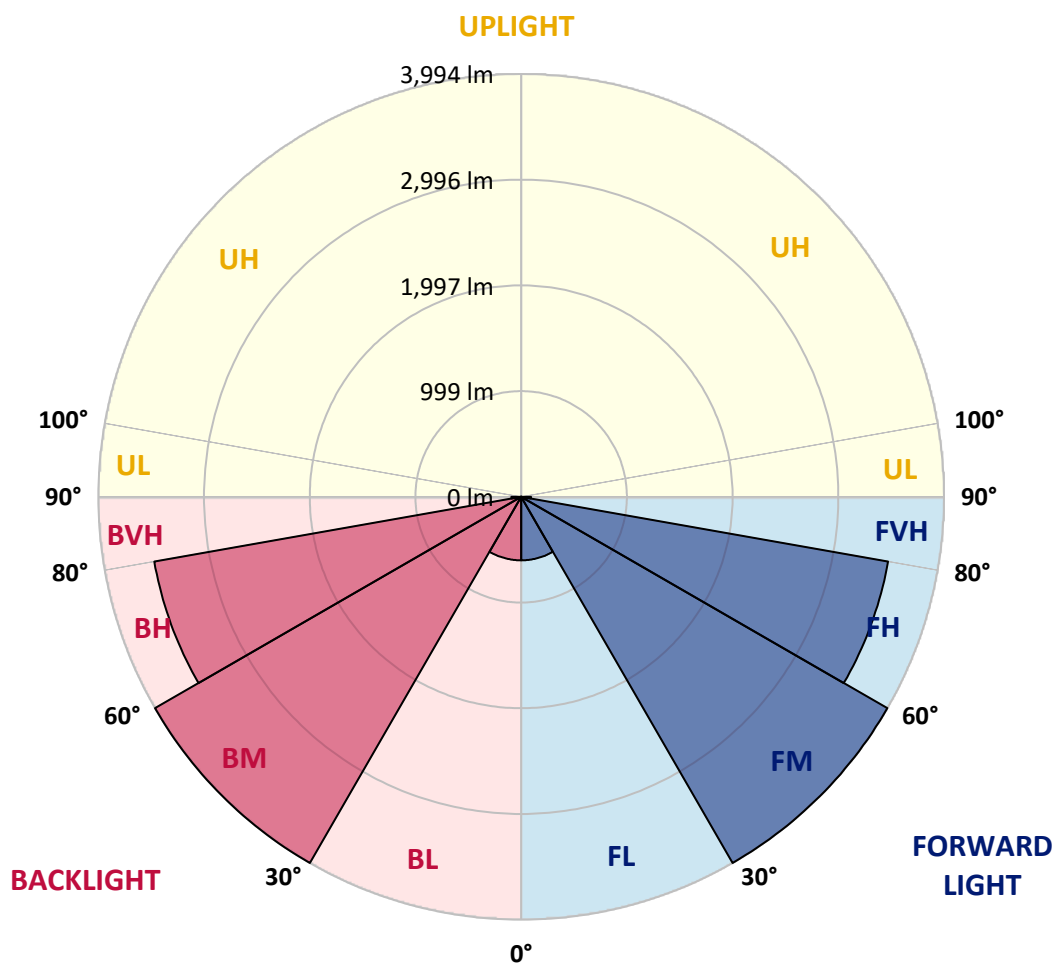
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	599.7	3.7			
FM	(30°-60°)	3994.4	24.3			
FH	(60°-80°)	3519.3	21.4			G2/5000
FVH	(80°-90°)	92.5	0.6			G1/100
BL	(0°-30°)	599.7	3.7	B2/1000		
BM	(30°-60°)	3994.4	24.3	B3/5000		
BH	(60°-80°)	3519.3	21.4	B4/5000		G2/5000
BVH	(80°-90°)	92.5	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9
2.5°	1103.1	1101.0	1102.0	1103.1	1102.0	1101.0	1101.0	1101.0	1103.1	1101.0	1106.1
5°	1124.6	1122.6	1123.6	1123.6	1123.6	1121.5	1121.5	1121.5	1120.5	1121.5	1132.8
7.5°	1165.7	1162.6	1161.6	1163.6	1161.6	1160.5	1159.5	1159.5	1157.4	1157.4	1171.8
10°	1214.9	1210.8	1212.9	1213.9	1210.8	1208.8	1208.8	1208.8	1205.7	1204.6	1223.1
12.5°	1269.3	1267.2	1267.2	1265.2	1264.2	1262.1	1261.1	1262.1	1258.0	1258.0	1276.5
15°	1321.6	1317.5	1318.5	1315.5	1313.4	1311.4	1310.3	1309.3	1307.3	1307.3	1318.5
17.5°	1369.9	1366.8	1365.7	1362.7	1359.6	1356.5	1354.5	1353.4	1350.4	1350.4	1360.6
20°	1420.1	1417.1	1415.0	1409.9	1404.7	1401.7	1397.6	1395.5	1391.4	1392.4	1403.7
22.5°	1477.6	1472.5	1468.4	1464.3	1455.0	1448.9	1443.7	1439.6	1437.6	1437.6	1453.0
25°	1554.5	1551.5	1545.3	1532.0	1520.7	1511.5	1503.2	1499.1	1495.0	1493.0	1516.6
27.5°	1649.0	1645.9	1637.7	1624.3	1608.9	1593.5	1584.3	1577.1	1572.0	1568.9	1602.8
30°	1774.1	1769.0	1761.8	1740.3	1726.9	1703.3	1693.1	1682.8	1671.5	1674.6	1714.6
32.5°	2019.4	2012.2	1989.6	1966.0	1925.0	1893.2	1860.3	1835.7	1812.1	1809.0	1852.1
35°	2242.0	2239.0	2234.9	2218.4	2203.0	2183.6	2168.2	2142.5	2121.0	2115.8	2236.9
37.5°	2362.1	2369.3	2363.1	2361.1	2361.1	2370.3	2399.0	2427.8	2448.3	2460.6	2528.3
40°	2545.8	2545.8	2538.6	2534.5	2526.3	2538.6	2550.9	2572.4	2581.7	2582.7	2651.5
42.5°	2754.1	2755.1	2747.9	2735.6	2731.5	2742.8	2759.2	2779.7	2792.0	2795.1	2875.1
45°	2986.0	2982.9	2976.7	2972.6	2975.7	2986.0	3005.5	3045.5	3064.0	3078.3	3165.5
47.5°	3237.4	3257.9	3240.4	3243.5	3243.5	3275.3	3319.5	3352.3	3382.0	3409.7	3502.1
50°	3566.7	3569.8	3572.9	3582.1	3588.3	3630.4	3685.8	3724.8	3767.9	3803.8	3954.6
52.5°	4006.9	4000.8	4016.2	4026.4	4061.3	4083.9	4176.2	4225.5	4285.0	4331.2	4551.8
55°	4533.3	4530.3	4552.8	4561.0	4607.2	4662.6	4765.2	4873.0	4974.6	5031.0	5332.7
57.5°	4910.9	4919.1	4958.1	5012.5	5102.8	5220.8	5373.7	5611.8	5804.7	5866.2	6198.7
60°	4994.1	5020.7	5079.2	5188.0	5342.9	5562.5	5863.2	6227.4	6580.4	6698.4	7010.4
62.5°	4761.1	4791.9	4878.1	5008.4	5210.6	5535.8	5969.9	6484.0	7008.3	7271.0	7428.0
63°	4687.2	4725.2	4789.9	4940.7	5145.9	5467.1	5928.8	6482.9	7026.8	7313.1	7436.2
65°	4340.4	4347.6	4444.1	4594.9	4825.8	5159.3	5625.1	6265.4	6868.7	7199.2	7114.0
67.5°	3735.0	3764.8	3845.8	3997.7	4222.4	4569.2	5075.1	5667.2	6197.7	6461.4	6080.7
70°	3017.8	3015.7	3116.3	3238.4	3436.4	3741.2	4184.5	4719.1	5139.8	5331.6	4694.4
72.5°	2155.8	2102.5	2176.4	2311.8	2473.9	2717.1	3068.1	3483.6	3860.2	4026.4	3432.3
75°	982.0	967.6	1033.3	1167.7	1331.9	1548.4	1836.7	2195.9	2557.1	2752.0	2186.6
77.5°	330.4	334.5	360.2	408.4	496.6	605.4	785.0	1014.8	1307.3	1500.2	1026.1
80°	221.6	227.8	236.0	243.2	253.4	269.9	308.9	368.4	458.7	555.1	324.2
82.5°	181.6	188.8	207.3	215.5	221.6	226.8	229.8	234.0	234.0	236.0	205.2
85°	130.3	142.6	167.3	182.6	188.8	192.9	198.0	204.2	195.0	186.8	159.0
87.5°	45.1	61.6	90.3	99.5	106.7	107.7	114.9	127.2	121.1	98.5	48.2
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°	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9	1095.9
2.5°	1101.0	1100.0	1101.0	1102.0	1102.0	1102.0	1103.1	1104.1	1104.1
5°	1121.5	1122.6	1121.5	1122.6	1122.6	1123.6	1123.6	1125.6	1125.6
7.5°	1156.4	1158.5	1157.4	1159.5	1159.5	1161.6	1160.5	1163.6	1163.6
10°	1203.6	1205.7	1207.7	1208.8	1207.7	1209.8	1211.8	1212.9	1211.8
12.5°	1257.0	1258.0	1257.0	1259.0	1259.0	1261.1	1261.1	1264.2	1264.2
15°	1306.2	1305.2	1304.2	1307.3	1309.3	1310.3	1312.4	1315.5	1312.4
17.5°	1350.4	1351.4	1349.3	1352.4	1356.5	1359.6	1361.6	1365.7	1364.7
20°	1394.5	1392.4	1394.5	1399.6	1403.7	1407.8	1411.9	1418.1	1417.1
22.5°	1437.6	1439.6	1444.8	1448.9	1456.0	1462.2	1467.3	1475.5	1478.6
25°	1498.1	1498.1	1506.3	1511.5	1521.7	1529.9	1541.2	1550.4	1555.6
27.5°	1575.1	1575.1	1584.3	1595.6	1611.0	1625.4	1637.7	1650.0	1647.9
30°	1679.7	1684.9	1693.1	1707.4	1728.0	1745.4	1761.8	1774.1	1775.2
32.5°	1817.2	1823.4	1848.0	1885.0	1928.1	1960.9	1985.5	2015.3	2019.4
35°	2129.2	2144.6	2176.4	2206.1	2223.6	2243.1	2255.4	2256.4	2258.5
37.5°	2457.5	2430.8	2406.2	2383.6	2373.4	2371.3	2371.3	2375.4	2377.5
40°	2577.6	2564.2	2553.0	2538.6	2542.7	2541.7	2548.8	2555.0	2559.1
42.5°	2782.8	2772.5	2762.3	2743.8	2754.1	2751.0	2761.2	2770.5	2775.6
45°	3069.1	3037.3	3014.7	2984.9	2995.2	2989.0	2989.0	3000.3	3002.4
47.5°	3385.1	3348.2	3302.0	3265.1	3252.8	3241.5	3251.7	3251.7	3240.4
50°	3763.8	3719.6	3665.2	3605.7	3585.2	3573.9	3578.0	3583.2	3551.4
52.5°	4277.8	4228.6	4151.6	4061.3	4041.8	4032.6	4030.5	4023.4	4015.2
55°	4974.6	4882.2	4787.8	4668.8	4632.9	4622.6	4623.6	4615.4	4634.9
57.5°	5796.5	5661.0	5443.5	5298.8	5212.6	5179.8	5150.0	5137.7	5138.7
60°	6610.2	6334.1	6008.9	5756.5	5575.9	5460.9	5370.6	5320.4	5306.0
62.5°	7134.5	6700.5	6212.0	5802.6	5506.1	5316.3	5173.6	5083.3	5054.6
63°	7175.6	6715.9	6193.6	5754.4	5442.5	5243.4	5093.6	5000.2	4969.4
65°	7086.3	6560.9	5952.4	5429.1	5087.4	4866.8	4704.7	4616.4	4592.8
67.5°	6392.6	5955.5	5335.7	4795.0	4450.2	4226.5	4040.8	3956.7	3930.0
70°	5200.3	4900.7	4392.8	3931.0	3609.8	3394.4	3206.6	3136.8	3135.8
72.5°	3855.1	3466.2	3163.5	2824.9	2544.7	2373.4	2210.2	2132.2	2093.3
75°	2549.9	2133.3	1794.7	1509.4	1230.3	1076.4	892.7	813.7	767.5
77.5°	1284.7	952.2	682.4	473.0	367.3	301.7	276.0	262.7	261.7
80°	427.9	321.2	276.0	258.6	253.4	254.5	251.4	246.3	240.1
82.5°	237.0	249.3	251.4	244.2	244.2	240.1	236.0	216.5	206.2
85°	203.2	223.7	225.7	221.6	220.6	214.5	207.3	180.6	165.2
87.5°	127.2	146.7	143.7	128.3	141.6	132.4	125.2	81.1	59.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)