

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: P157341

Luminaire Tested: **VST-E04-LED-E-U-5MQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P157341  
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-E04-LED-E-U-5MQ-7050  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (84) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13129.5 lumens  
Efficiency: N/A  
Efficacy: 135.1 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

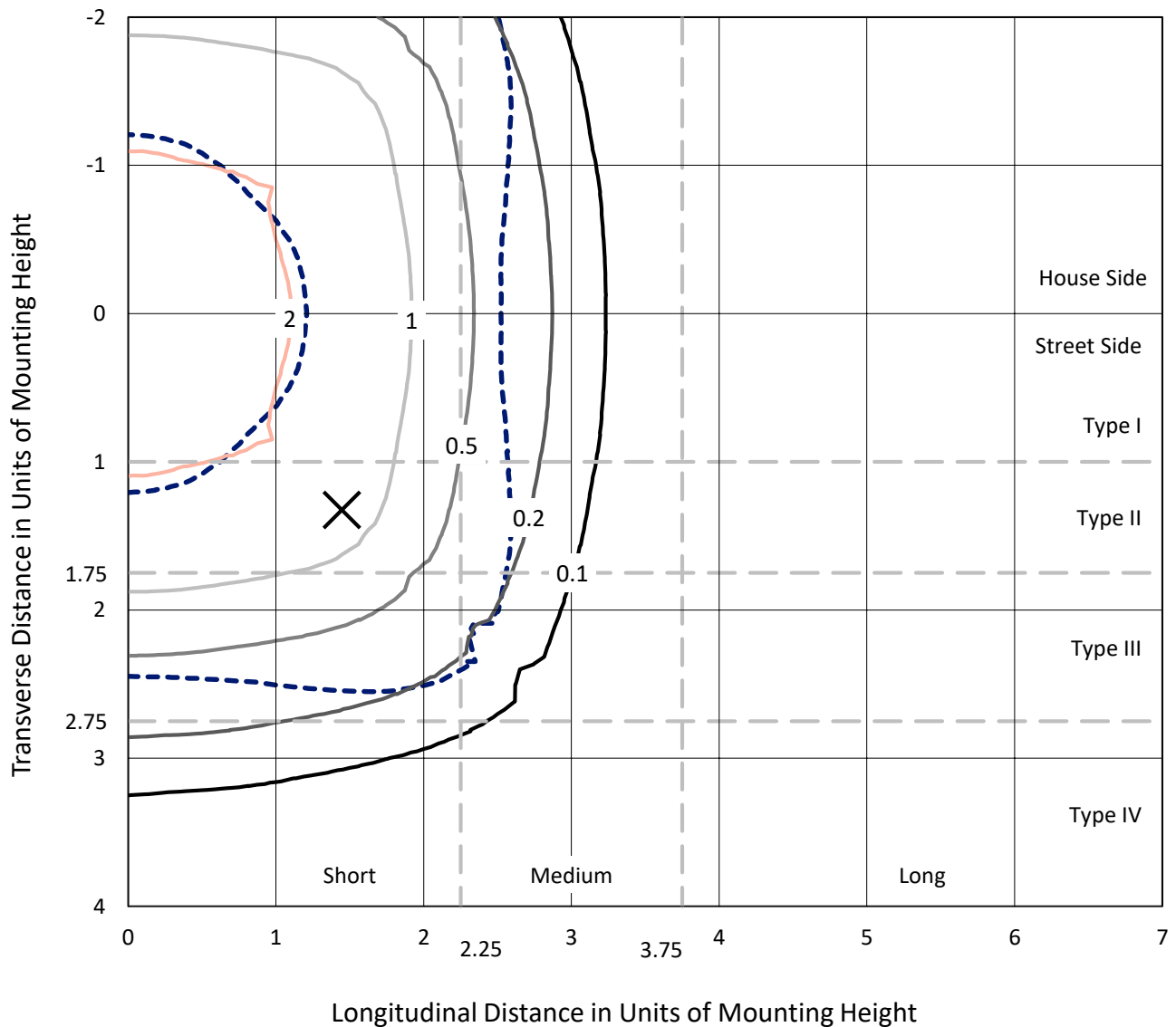
Input Watts (W): 97.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

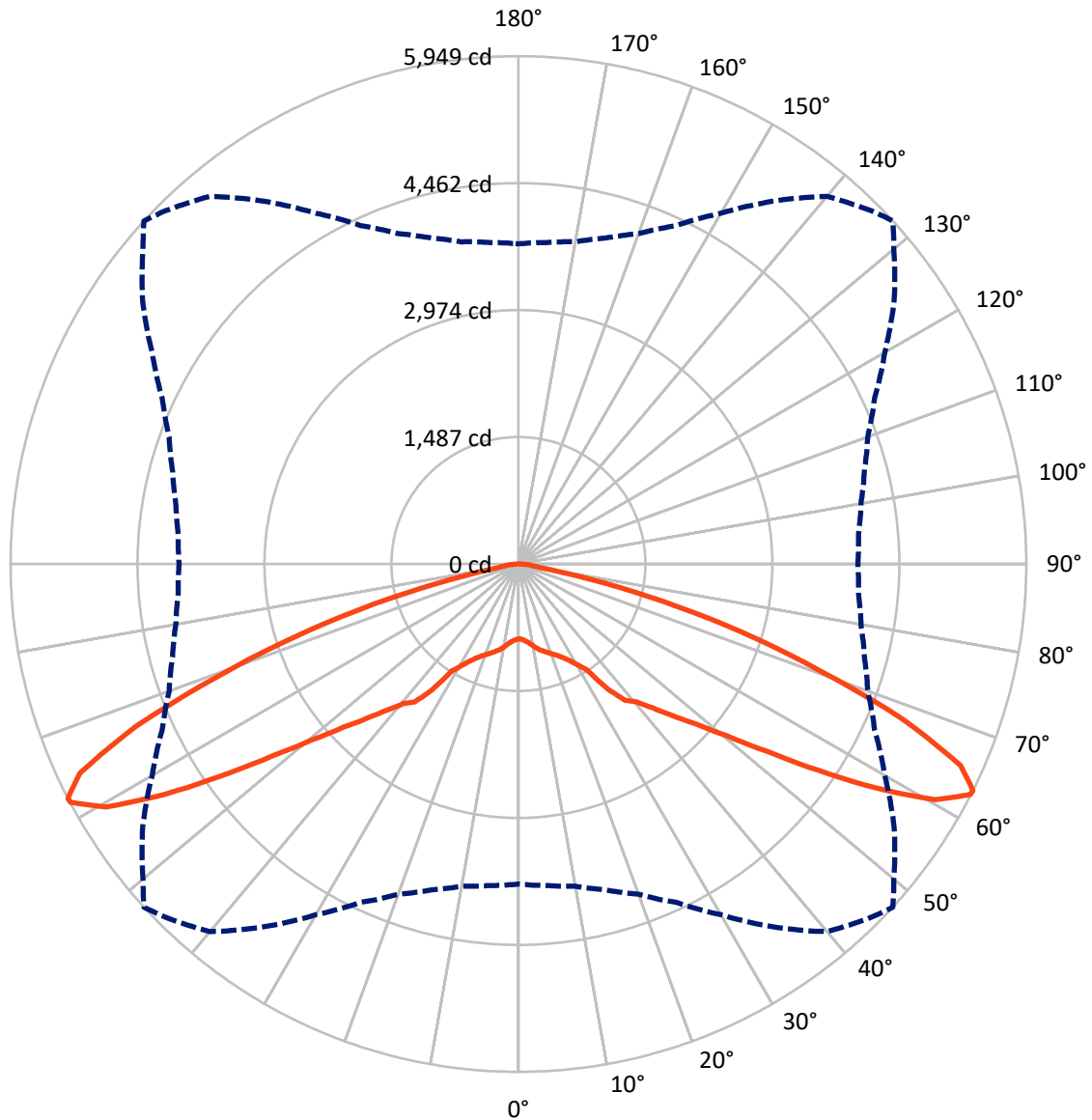
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.4 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

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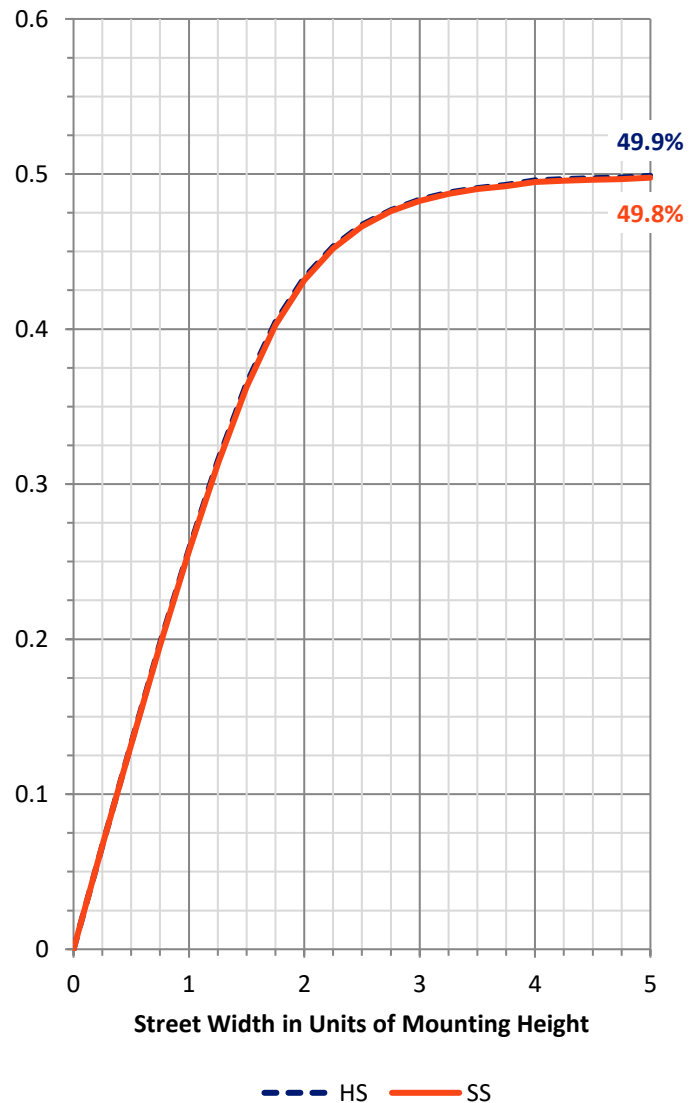
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6564.7	0.0	6564.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	6564.7	0.0	6564.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	13129.5	0.0	13129.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.0	0.7
10°-20°	299.2	2.3
20°-30°	572.3	4.4
30°-40°	1094.7	8.3
40°-50°	1894.3	14.4
50°-60°	3402.0	25.9
60°-70°	4136.9	31.5
70°-80°	1494.0	11.4
80°-90°	148.0	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°	13129.5	100.0
0°-180°	13129.5	100.0

**Coefficient of Utilization**



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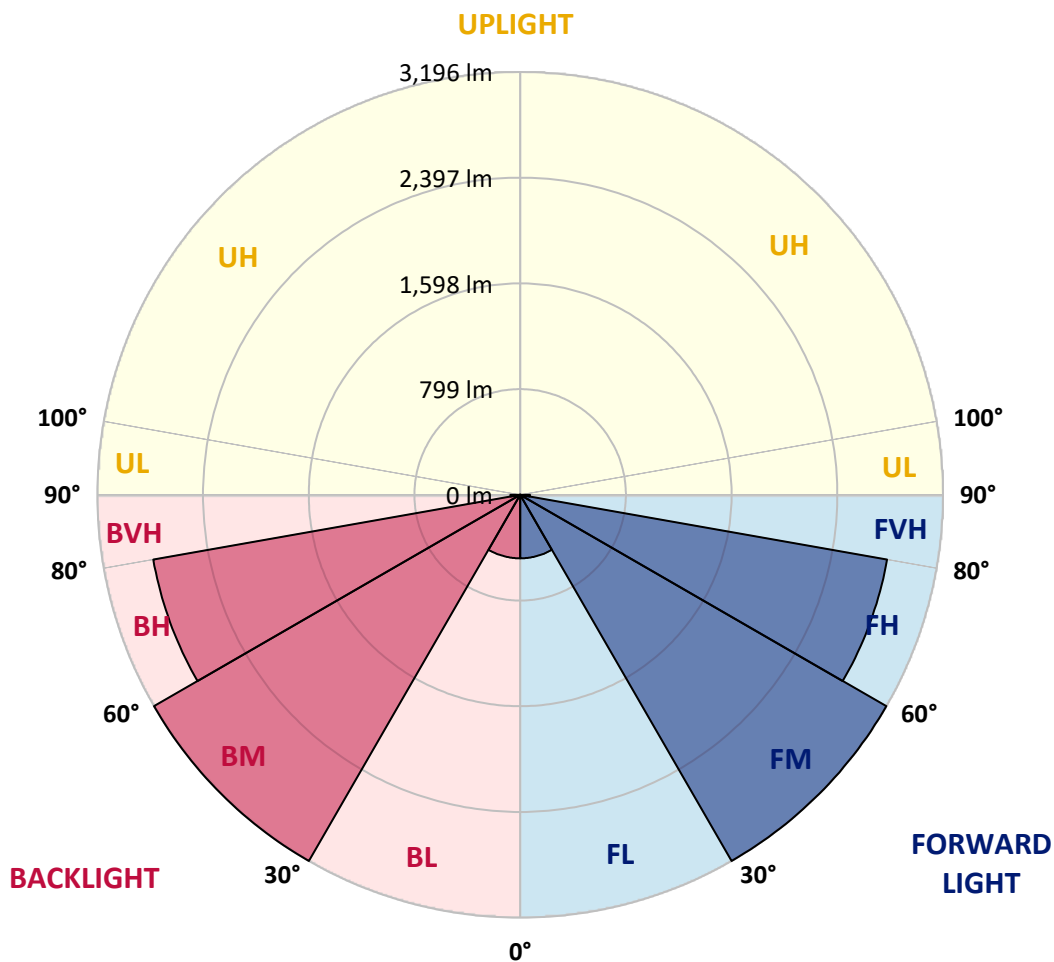
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	479.8	3.7			
FM (30°-60°)	3195.5	24.3			
FH (60°-80°)	2815.5	21.4			G2/5000
FVH (80°-90°)	74.0	0.6			G1/100
BL (0°-30°)	479.8	3.7	B1/500		
BM (30°-60°)	3195.5	24.3	B3/5000		
BH (60°-80°)	2815.5	21.4	B4/5000		G2/5000
BVH (80°-90°)	74.0	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°	876.7	876.7	876.7	876.7	876.7	876.7	876.7	876.7	876.7	876.7	876.7
2.5°	882.5	880.8	881.6	882.5	881.6	880.8	880.8	880.8	882.5	880.8	884.9
5°	899.7	898.0	898.9	898.9	898.9	897.2	897.2	897.2	896.4	897.2	906.3
7.5°	932.5	930.1	929.2	930.9	929.2	928.4	927.6	927.6	926.0	926.0	937.4
10°	971.9	968.6	970.3	971.1	968.6	967.0	967.0	967.0	964.5	963.7	978.5
12.5°	1015.4	1013.8	1013.8	1012.2	1011.3	1009.7	1008.9	1009.7	1006.4	1006.4	1021.2
15°	1057.3	1054.0	1054.8	1052.4	1050.7	1049.1	1048.3	1047.4	1045.8	1045.8	1054.8
17.5°	1095.9	1093.4	1092.6	1090.1	1087.7	1085.2	1083.6	1082.7	1080.3	1080.3	1088.5
20°	1136.1	1133.6	1132.0	1127.9	1123.8	1121.3	1118.0	1116.4	1113.1	1113.9	1123.0
22.5°	1182.1	1178.0	1174.7	1171.4	1164.0	1159.1	1155.0	1151.7	1150.1	1150.1	1162.4
25°	1243.6	1241.2	1236.3	1225.6	1216.6	1209.2	1202.6	1199.3	1196.0	1194.4	1213.3
27.5°	1319.2	1316.7	1310.1	1299.5	1287.1	1274.8	1267.4	1261.7	1257.6	1255.1	1282.2
30°	1419.3	1415.2	1409.5	1392.2	1381.5	1362.7	1354.5	1346.3	1337.2	1339.7	1371.7
32.5°	1615.5	1609.8	1591.7	1572.8	1540.0	1514.5	1488.3	1468.6	1449.7	1447.2	1481.7
35°	1793.6	1791.2	1787.9	1774.8	1762.4	1746.8	1734.5	1714.0	1696.8	1692.7	1789.5
37.5°	1889.7	1895.4	1890.5	1888.9	1888.9	1896.2	1919.2	1942.2	1958.6	1968.5	2022.7
40°	2036.6	2036.6	2030.9	2027.6	2021.0	2030.9	2040.7	2058.0	2065.3	2066.2	2121.2
42.5°	2203.3	2204.1	2198.3	2188.5	2185.2	2194.2	2207.4	2223.8	2233.6	2236.1	2300.1
45°	2388.8	2386.3	2381.4	2378.1	2380.6	2388.8	2404.4	2436.4	2451.2	2462.7	2532.4
47.5°	2589.9	2606.3	2592.4	2594.8	2594.8	2620.3	2655.6	2681.8	2705.6	2727.8	2801.7
50°	2853.4	2855.9	2858.3	2865.7	2870.6	2904.3	2948.6	2979.8	3014.3	3043.0	3163.7
52.5°	3205.6	3200.6	3212.9	3221.2	3249.1	3267.1	3341.0	3380.4	3428.0	3465.0	3641.4
55°	3626.7	3624.2	3642.3	3648.8	3685.8	3730.1	3812.2	3898.4	3979.6	4024.8	4266.1
57.5°	3928.8	3935.3	3966.5	4010.0	4082.3	4176.7	4299.0	4489.4	4643.7	4693.0	4959.0
60°	3995.2	4016.6	4063.4	4150.4	4274.3	4450.0	4690.5	4981.9	5264.3	5358.7	5608.3
62.5°	3808.9	3833.5	3902.5	4006.7	4168.5	4428.7	4775.9	5187.2	5606.6	5816.8	5942.4
63°	3749.8	3780.2	3831.9	3952.6	4116.7	4373.7	4743.1	5186.3	5621.4	5850.4	5948.9
65°	3472.3	3478.1	3555.3	3675.9	3860.6	4127.4	4500.1	5012.3	5495.0	5759.3	5691.2
67.5°	2988.0	3011.8	3076.7	3198.2	3377.9	3655.4	4060.1	4533.7	4958.1	5169.1	4864.6
70°	2414.2	2412.6	2493.0	2590.7	2749.1	2992.9	3347.6	3775.2	4111.8	4265.3	3755.5
72.5°	1724.7	1682.0	1741.1	1849.5	1979.2	2173.7	2454.4	2786.9	3088.2	3221.2	2745.9
75°	785.6	774.1	826.6	934.2	1065.5	1238.7	1469.4	1756.7	2045.6	2201.6	1749.3
77.5°	264.3	267.6	288.1	326.7	397.3	484.3	628.0	811.9	1045.8	1200.1	820.9
80°	177.3	182.2	188.8	194.5	202.8	215.9	247.1	294.7	366.9	444.1	259.4
82.5°	145.3	151.0	165.8	172.4	177.3	181.4	183.9	187.2	187.2	188.8	164.2
85°	104.3	114.1	133.8	146.1	151.0	154.3	158.4	163.4	156.0	149.4	127.2
87.5°	36.1	49.3	72.2	79.6	85.4	86.2	91.9	101.8	96.9	78.8	38.6
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°	876.7	876.7	876.7	876.7	876.7	876.7	876.7	876.7	876.7
2.5°	880.8	880.0	880.8	881.6	881.6	881.6	882.5	883.3	883.3
5°	897.2	898.0	897.2	898.0	898.0	898.9	898.9	900.5	900.5
7.5°	925.1	926.8	926.0	927.6	927.6	929.2	928.4	930.9	930.9
10°	962.9	964.5	966.2	967.0	966.2	967.8	969.5	970.3	969.5
12.5°	1005.6	1006.4	1005.6	1007.2	1007.2	1008.9	1008.9	1011.3	1011.3
15°	1045.0	1044.2	1043.3	1045.8	1047.4	1048.3	1049.9	1052.4	1049.9
17.5°	1080.3	1081.1	1079.5	1081.9	1085.2	1087.7	1089.3	1092.6	1091.8
20°	1115.6	1113.9	1115.6	1119.7	1123.0	1126.3	1129.5	1134.5	1133.6
22.5°	1150.1	1151.7	1155.8	1159.1	1164.8	1169.8	1173.9	1180.4	1182.9
25°	1198.5	1198.5	1205.1	1209.2	1217.4	1223.9	1233.0	1240.4	1244.5
27.5°	1260.1	1260.1	1267.4	1276.5	1288.8	1300.3	1310.1	1320.0	1318.3
30°	1343.8	1347.9	1354.5	1366.0	1382.4	1396.3	1409.5	1419.3	1420.1
32.5°	1453.8	1458.7	1478.4	1508.0	1542.4	1568.7	1588.4	1612.2	1615.5
35°	1703.3	1715.6	1741.1	1764.9	1778.9	1794.5	1804.3	1805.1	1806.8
37.5°	1966.0	1944.7	1925.0	1906.9	1898.7	1897.1	1897.1	1900.3	1902.0
40°	2062.1	2051.4	2042.4	2030.9	2034.2	2033.3	2039.1	2044.0	2047.3
42.5°	2226.2	2218.0	2209.8	2195.0	2203.3	2200.8	2209.0	2216.4	2220.5
45°	2455.3	2429.8	2411.8	2388.0	2396.2	2391.2	2391.2	2400.3	2401.9
47.5°	2708.1	2678.5	2641.6	2612.1	2602.2	2593.2	2601.4	2601.4	2592.4
50°	3011.0	2975.7	2932.2	2884.6	2868.2	2859.1	2862.4	2866.5	2841.1
52.5°	3422.3	3382.9	3321.3	3249.1	3233.5	3226.1	3224.4	3218.7	3212.1
55°	3979.6	3905.8	3830.2	3735.0	3706.3	3698.1	3698.9	3692.3	3707.9
57.5°	4637.2	4528.8	4354.8	4239.0	4170.1	4143.8	4120.0	4110.2	4111.0
60°	5288.1	5067.3	4807.1	4605.2	4460.7	4368.7	4296.5	4256.3	4244.8
62.5°	5707.6	5360.4	4969.6	4642.1	4404.9	4253.0	4138.9	4066.7	4043.7
63°	5740.4	5372.7	4954.9	4603.5	4354.0	4194.7	4074.9	4000.2	3975.5
65°	5669.0	5248.7	4762.0	4343.3	4069.9	3893.5	3763.8	3693.2	3674.3
67.5°	5114.1	4764.4	4268.6	3836.0	3560.2	3381.2	3232.6	3165.3	3144.0
70°	4160.2	3920.5	3514.2	3144.8	2887.9	2715.5	2565.3	2509.4	2508.6
72.5°	3084.1	2772.9	2530.8	2259.9	2035.8	1898.7	1768.2	1705.8	1674.6
75°	2039.9	1706.6	1435.7	1207.5	984.2	861.1	714.2	651.0	614.0
77.5°	1027.7	761.8	545.9	378.4	293.9	241.3	220.8	210.1	209.3
80°	342.3	256.9	220.8	206.9	202.8	203.6	201.1	197.0	192.1
82.5°	189.6	199.5	201.1	195.4	195.4	192.1	188.8	173.2	165.0
85°	162.5	179.0	180.6	177.3	176.5	171.6	165.8	144.5	132.2
87.5°	101.8	117.4	114.9	102.6	113.3	105.9	100.1	64.8	47.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)