

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: P157349

Luminaire Tested: **VST-E05-LED-E-U-5MQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157349
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-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (105) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14608.4 lumens
Efficiency: N/A
Efficacy: 114.8 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

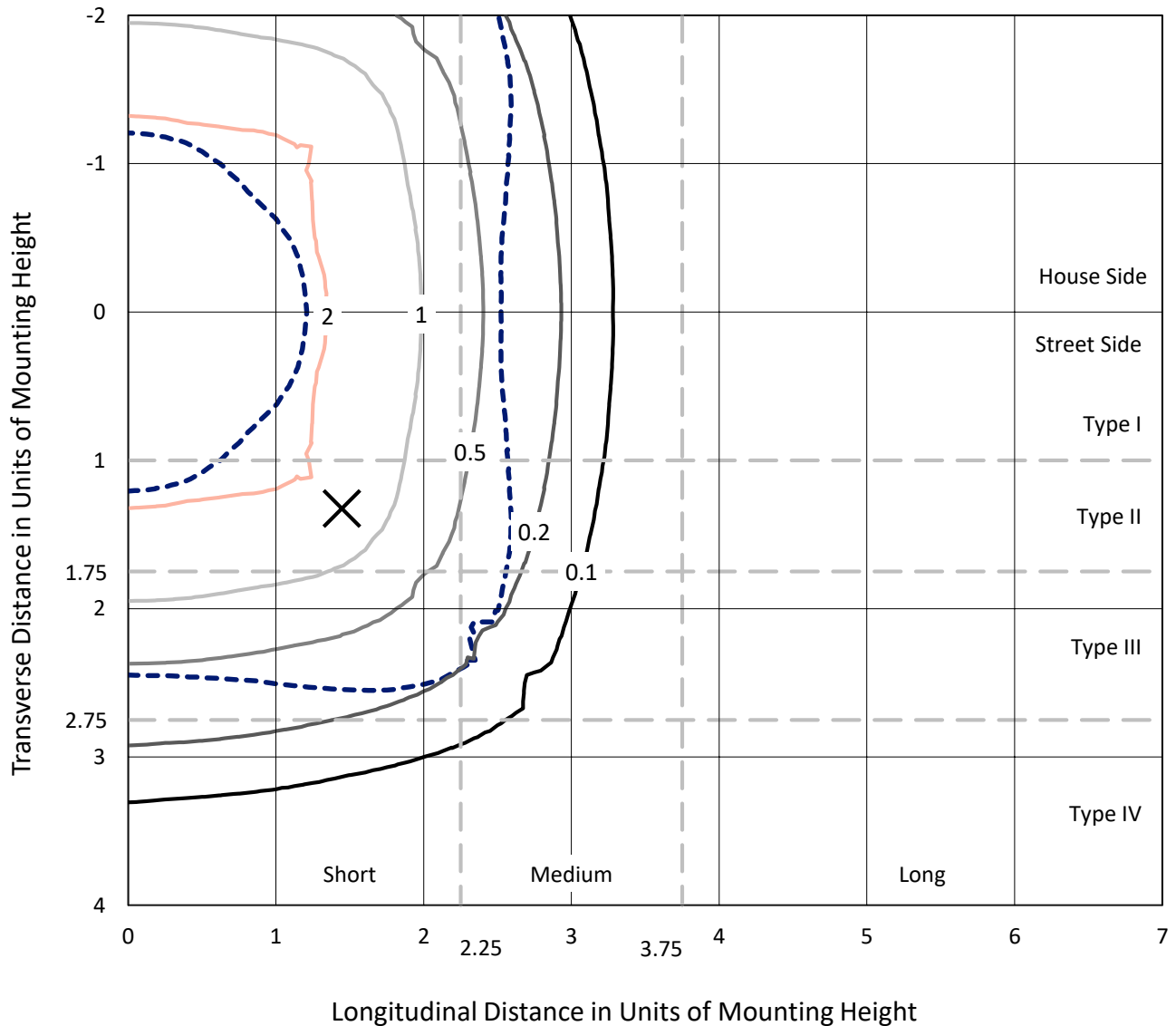
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

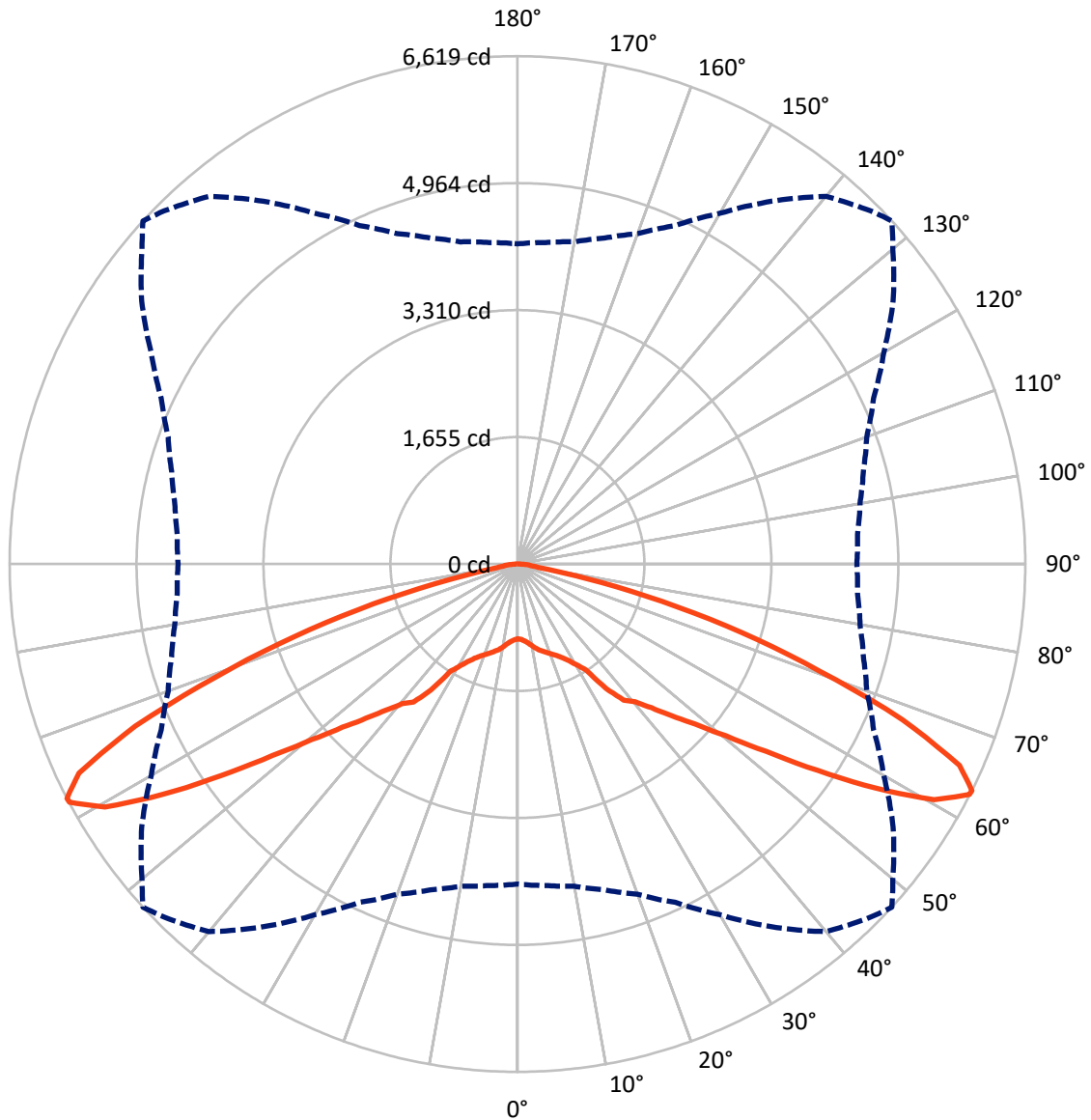
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.7 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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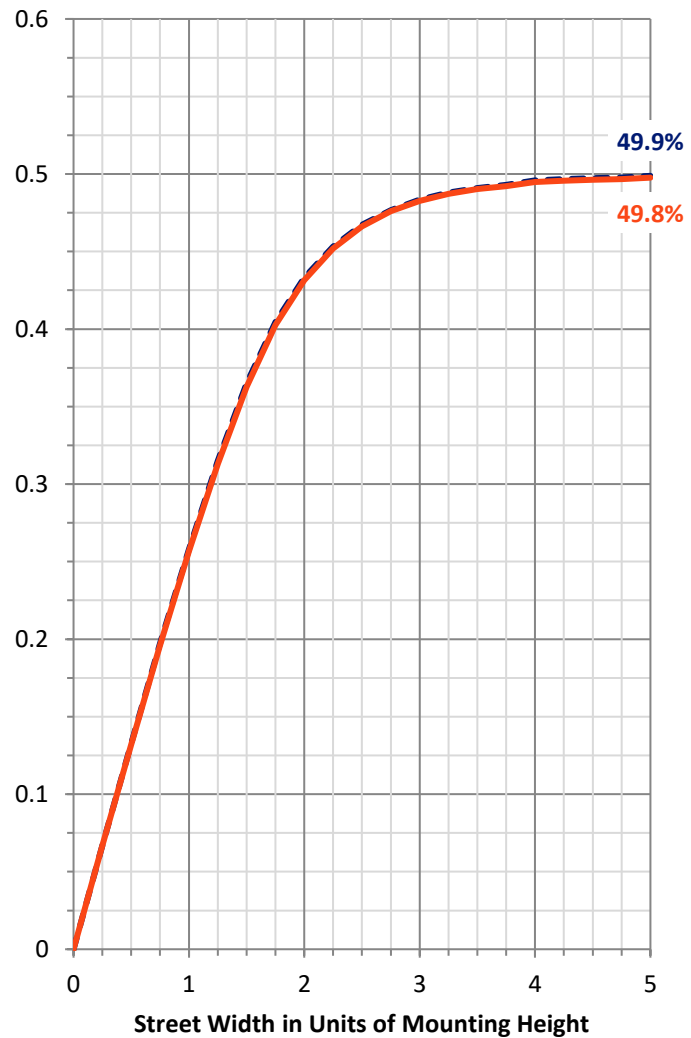
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7304.2	0.0	7304.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7304.2	0.0	7304.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	14608.4	0.0	14608.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.9	0.7
10°-20°	332.9	2.3
20°-30°	636.8	4.4
30°-40°	1218.1	8.3
40°-50°	2107.7	14.4
50°-60°	3785.2	25.9
60°-70°	4602.9	31.5
70°-80°	1662.3	11.4
80°-90°	164.6	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°	14608.4	100.0
0°-180°	14608.4	100.0



--- HS — SS

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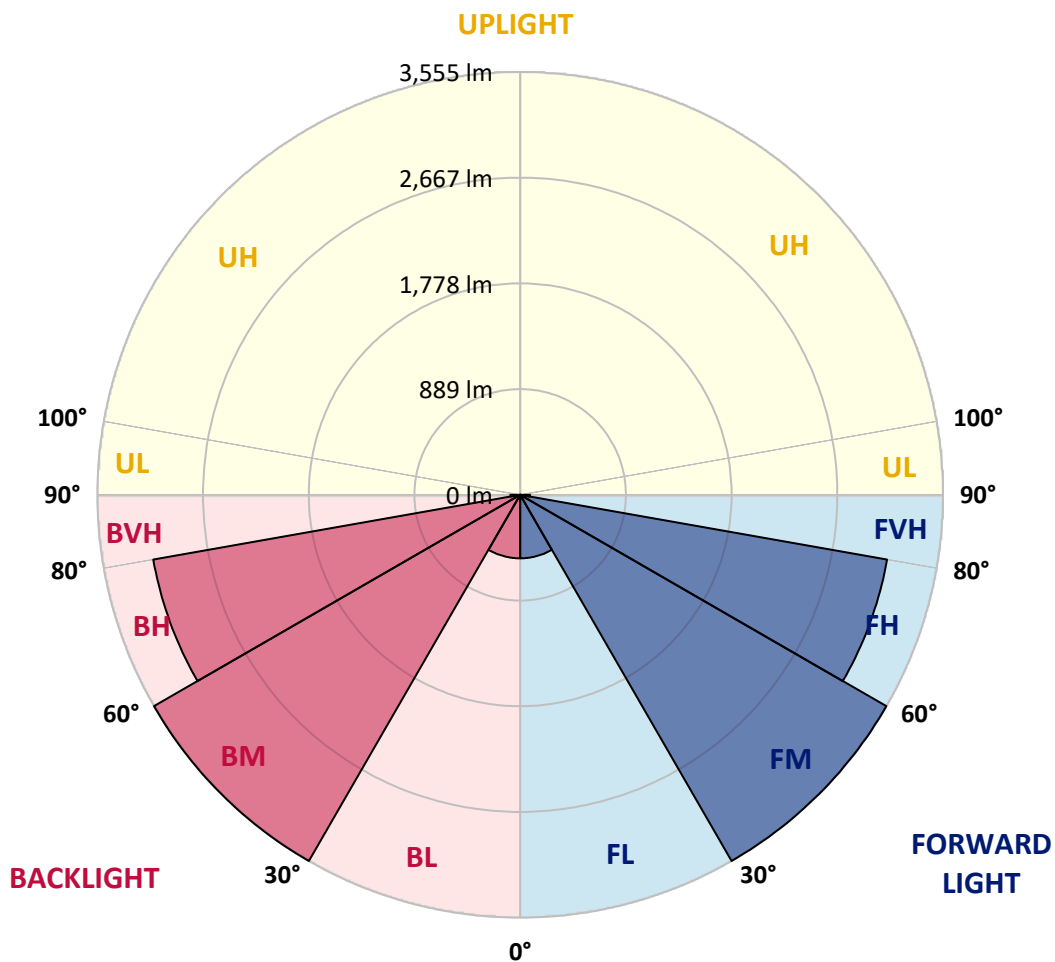
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	533.8	3.7			
FM	(30°-60°)	3555.5	24.3			
FH	(60°-80°)	3132.6	21.4			G2/5000
FVH	(80°-90°)	82.3	0.6			G1/100
BL	(0°-30°)	533.8	3.7	B2/1000		
BM	(30°-60°)	3555.5	24.3	B3/5000		
BH	(60°-80°)	3132.6	21.4	B4/5000		G2/5000
BVH	(80°-90°)	82.3	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°	975.5	975.5	975.5	975.5	975.5	975.5	975.5	975.5	975.5	975.5	975.5
2.5°	981.9	980.0	980.9	981.9	980.9	980.0	980.0	980.0	981.9	980.0	984.6
5°	1001.0	999.2	1000.1	1000.1	1000.1	998.3	998.3	998.3	997.4	998.3	1008.3
7.5°	1037.6	1034.8	1033.9	1035.7	1033.9	1033.0	1032.1	1032.1	1030.3	1030.3	1043.0
10°	1081.4	1077.8	1079.6	1080.5	1077.8	1075.9	1075.9	1075.9	1073.2	1072.3	1088.7
12.5°	1129.8	1128.0	1128.0	1126.2	1125.2	1123.4	1122.5	1123.4	1119.8	1119.8	1136.2
15°	1176.4	1172.7	1173.7	1170.9	1169.1	1167.3	1166.3	1165.4	1163.6	1163.6	1173.7
17.5°	1219.3	1216.6	1215.7	1212.9	1210.2	1207.4	1205.6	1204.7	1202.0	1202.0	1211.1
20°	1264.1	1261.3	1259.5	1254.9	1250.4	1247.6	1244.0	1242.2	1238.5	1239.4	1249.5
22.5°	1315.2	1310.7	1307.0	1303.4	1295.1	1289.7	1285.1	1281.4	1279.6	1279.6	1293.3
25°	1383.7	1381.0	1375.5	1363.6	1353.6	1345.4	1338.1	1334.4	1330.8	1328.9	1349.9
27.5°	1467.8	1465.0	1457.7	1445.8	1432.1	1418.4	1410.2	1403.8	1399.3	1396.5	1426.7
30°	1579.2	1574.6	1568.2	1549.0	1537.2	1516.2	1507.0	1497.9	1487.8	1490.6	1526.2
32.5°	1797.5	1791.1	1771.0	1750.0	1713.4	1685.1	1655.9	1634.0	1613.0	1610.2	1648.6
35°	1995.7	1992.9	1989.3	1974.7	1961.0	1943.6	1929.9	1907.1	1887.9	1883.3	1991.1
37.5°	2102.5	2108.9	2103.4	2101.6	2101.6	2109.8	2135.4	2161.0	2179.3	2190.2	2250.5
40°	2266.0	2266.0	2259.6	2256.0	2248.7	2259.6	2270.6	2289.8	2298.0	2298.9	2360.1
42.5°	2451.4	2452.3	2446.0	2435.0	2431.3	2441.4	2456.0	2474.3	2485.2	2488.0	2559.2
45°	2657.8	2655.1	2649.6	2646.0	2648.7	2657.8	2675.2	2710.8	2727.3	2740.1	2817.7
47.5°	2881.6	2899.9	2884.4	2887.1	2887.1	2915.4	2954.7	2983.9	3010.4	3035.1	3117.3
50°	3174.8	3177.5	3180.3	3188.5	3194.0	3231.4	3280.8	3315.5	3353.8	3385.8	3520.1
52.5°	3566.6	3561.2	3574.9	3584.0	3615.0	3635.1	3717.3	3761.2	3814.2	3855.3	4051.6
55°	4035.2	4032.4	4052.5	4059.8	4100.9	4150.3	4241.6	4337.5	4427.9	4478.2	4746.7
57.5°	4371.3	4378.6	4413.3	4461.7	4542.1	4647.1	4783.2	4995.1	5166.8	5221.6	5517.5
60°	4445.3	4469.0	4521.1	4617.9	4755.8	4951.3	5218.9	5543.1	5857.3	5962.4	6240.0
62.5°	4237.9	4265.3	4342.1	4458.1	4638.0	4927.5	5313.9	5771.5	6238.2	6472.0	6611.7
63°	4172.2	4206.0	4263.5	4397.8	4580.5	4866.3	5277.3	5770.5	6254.6	6509.4	6619.0
65°	3863.5	3869.9	3955.7	4090.0	4295.5	4592.3	5007.0	5576.9	6114.0	6408.1	6332.3
67.5°	3324.6	3351.1	3423.2	3558.4	3758.4	4067.1	4517.4	5044.4	5516.6	5751.4	5412.5
70°	2686.2	2684.3	2773.8	2882.5	3058.8	3330.1	3724.6	4200.5	4575.0	4745.8	4178.6
72.5°	1918.9	1871.5	1937.2	2057.8	2202.1	2418.6	2730.9	3100.8	3436.0	3584.0	3055.2
75°	874.1	861.3	919.7	1039.4	1185.5	1378.2	1634.9	1954.6	2276.1	2449.6	1946.3
77.5°	294.1	297.8	320.6	363.5	442.1	538.9	698.7	903.3	1163.6	1335.3	913.4
80°	197.3	202.8	210.1	216.5	225.6	240.2	274.9	327.9	408.3	494.1	288.6
82.5°	161.7	168.1	184.5	191.8	197.3	201.9	204.6	208.2	208.2	210.1	182.7
85°	116.0	127.0	148.9	162.6	168.1	171.7	176.3	181.8	173.5	166.2	141.6
87.5°	40.2	54.8	80.4	88.6	95.0	95.9	102.3	113.3	107.8	87.7	42.9
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°	975.5	975.5	975.5	975.5	975.5	975.5	975.5	975.5	975.5
2.5°	980.0	979.1	980.0	980.9	980.9	980.9	981.9	982.8	982.8
5°	998.3	999.2	998.3	999.2	999.2	1000.1	1000.1	1001.9	1001.9
7.5°	1029.3	1031.2	1030.3	1032.1	1032.1	1033.9	1033.0	1035.7	1035.7
10°	1071.4	1073.2	1075.0	1075.9	1075.0	1076.8	1078.7	1079.6	1078.7
12.5°	1118.9	1119.8	1118.9	1120.7	1120.7	1122.5	1122.5	1125.2	1125.2
15°	1162.7	1161.8	1160.9	1163.6	1165.4	1166.3	1168.2	1170.9	1168.2
17.5°	1202.0	1202.9	1201.1	1203.8	1207.4	1210.2	1212.0	1215.7	1214.8
20°	1241.2	1239.4	1241.2	1245.8	1249.5	1253.1	1256.8	1262.3	1261.3
22.5°	1279.6	1281.4	1286.0	1289.7	1296.0	1301.5	1306.1	1313.4	1316.1
25°	1333.5	1333.5	1340.8	1345.4	1354.5	1361.8	1371.9	1380.1	1384.6
27.5°	1402.0	1402.0	1410.2	1420.3	1434.0	1446.7	1457.7	1468.7	1466.8
30°	1495.2	1499.7	1507.0	1519.8	1538.1	1553.6	1568.2	1579.2	1580.1
32.5°	1617.5	1623.0	1644.9	1677.8	1716.2	1745.4	1767.3	1793.8	1797.5
35°	1895.2	1908.9	1937.2	1963.7	1979.2	1996.6	2007.5	2008.5	2010.3
37.5°	2187.5	2163.7	2141.8	2121.7	2112.6	2110.8	2110.8	2114.4	2116.2
40°	2294.3	2282.5	2272.4	2259.6	2263.3	2262.4	2268.8	2274.2	2277.9
42.5°	2477.0	2467.9	2458.7	2442.3	2451.4	2448.7	2457.8	2466.0	2470.6
45°	2731.8	2703.5	2683.4	2656.9	2666.1	2660.6	2660.6	2670.6	2672.5
47.5°	3013.1	2980.3	2939.2	2906.3	2895.3	2885.3	2894.4	2894.4	2884.4
50°	3350.2	3310.9	3262.5	3209.5	3191.2	3181.2	3184.9	3189.4	3161.1
52.5°	3807.8	3763.9	3695.4	3615.0	3597.7	3589.5	3587.6	3581.2	3573.9
55°	4427.9	4345.7	4261.7	4155.7	4123.8	4114.6	4115.6	4108.2	4125.6
57.5°	5159.5	5039.0	4845.3	4716.5	4639.8	4610.6	4584.1	4573.1	4574.1
60°	5883.8	5638.1	5348.6	5123.9	4963.1	4860.9	4780.5	4735.7	4722.9
62.5°	6350.5	5964.2	5529.4	5165.0	4901.0	4732.1	4605.1	4524.7	4499.2
63°	6387.1	5977.9	5513.0	5122.1	4844.4	4667.2	4533.9	4450.8	4423.4
65°	6307.6	5840.0	5298.3	4832.5	4528.4	4332.0	4187.7	4109.2	4088.2
67.5°	5690.2	5301.1	4749.4	4268.1	3961.2	3762.1	3596.8	3521.9	3498.1
70°	4628.9	4362.2	3910.1	3499.0	3213.2	3021.4	2854.2	2792.1	2791.2
72.5°	3431.5	3085.3	2815.9	2514.5	2265.1	2112.6	1967.4	1897.9	1863.2
75°	2269.7	1898.9	1597.4	1343.5	1095.1	958.1	794.6	724.3	683.2
77.5°	1143.5	847.6	607.4	421.1	327.0	268.5	245.7	233.8	232.9
80°	380.9	285.9	245.7	230.2	225.6	226.5	223.8	219.2	213.7
82.5°	211.0	221.9	223.8	217.4	217.4	213.7	210.1	192.7	183.6
85°	180.8	199.1	200.9	197.3	196.4	190.9	184.5	160.7	147.0
87.5°	113.3	130.6	127.9	114.2	126.0	117.8	111.4	72.2	53.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)