

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: P270892

Luminaire Tested: **NVN-AF-03-LED-U-5WQ-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270892
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24131)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-03-LED-U-5WQ-7027-1200
Description: NAVION ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17961.1 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 191
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

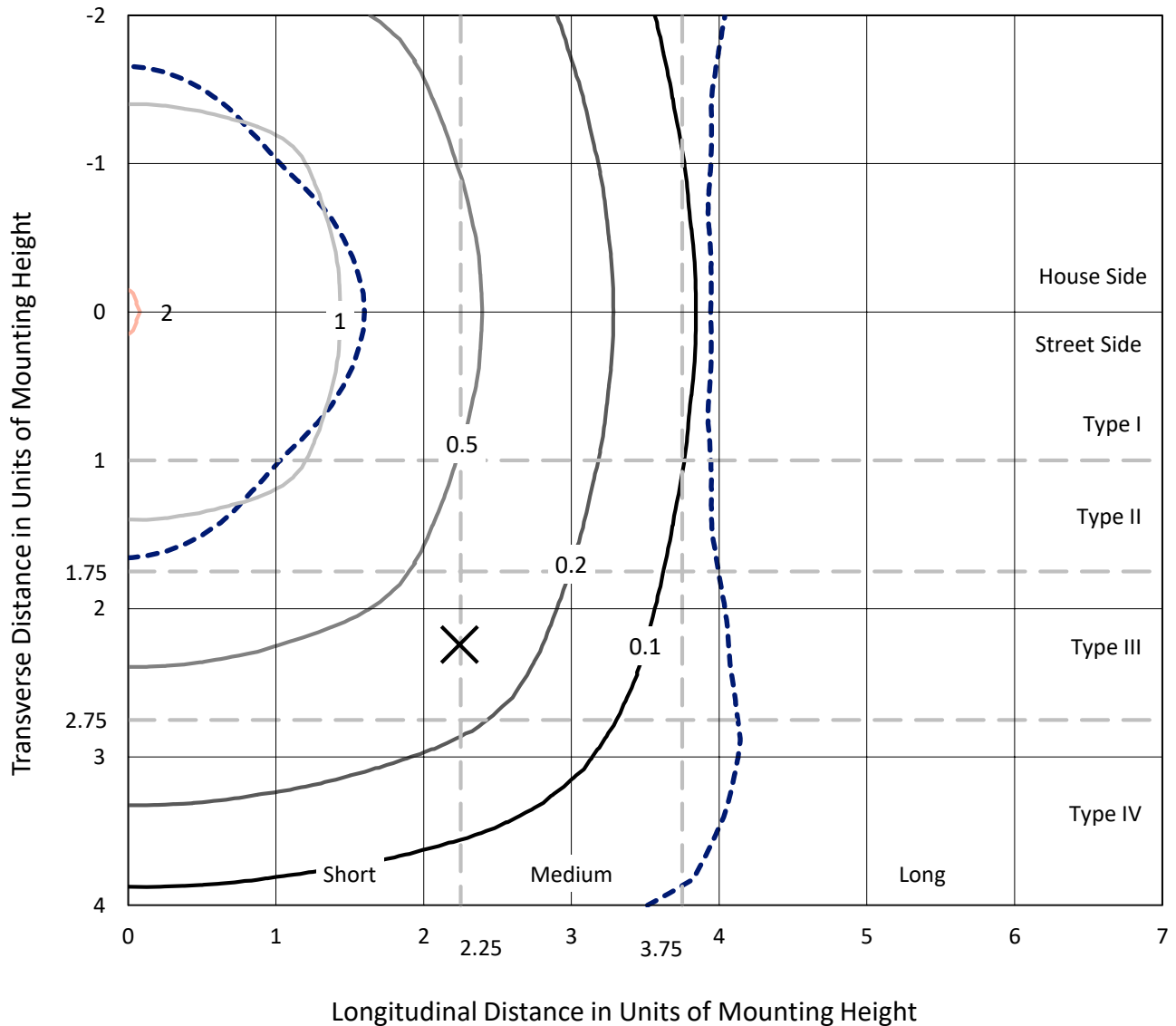


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

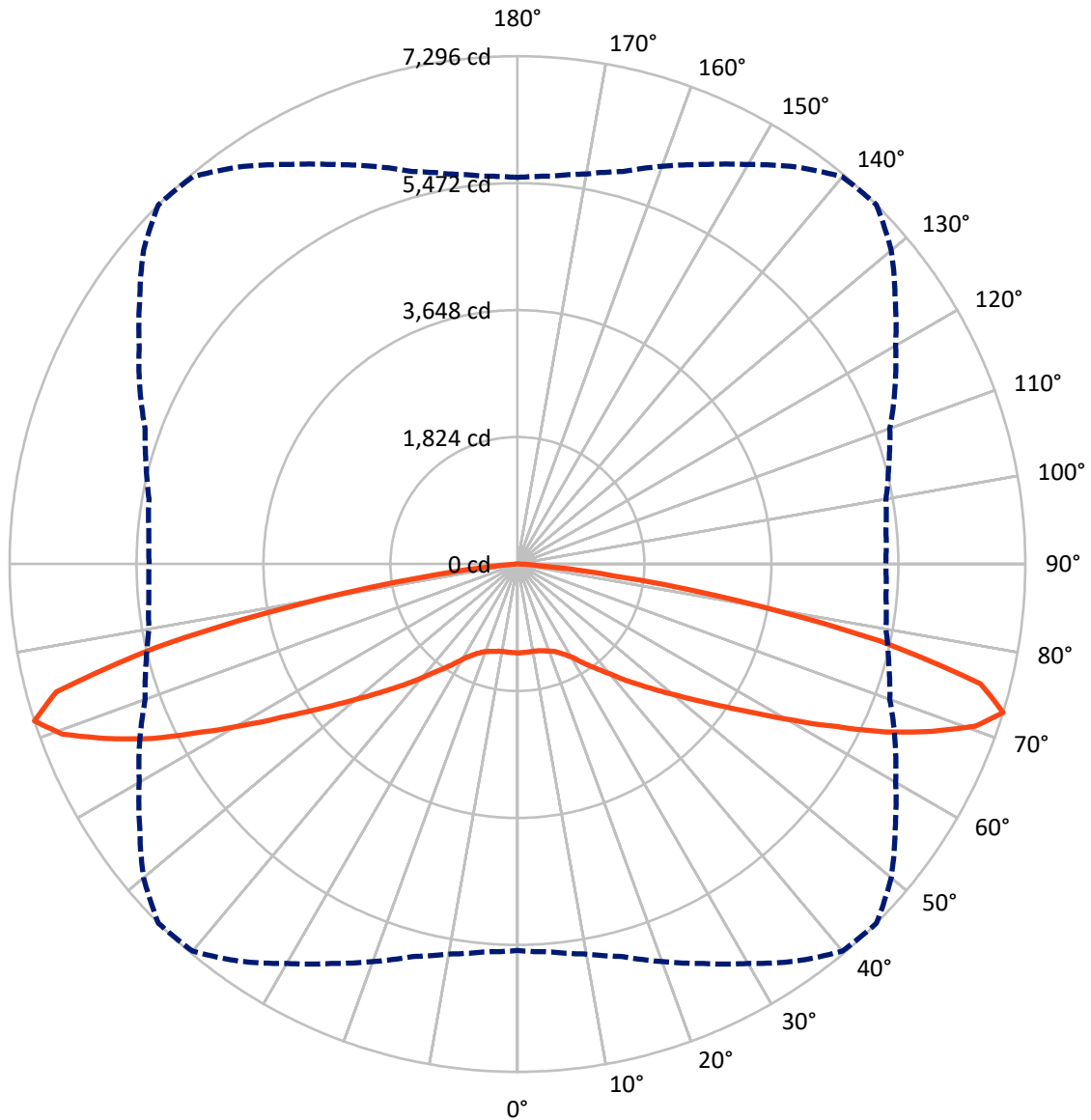


Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8980.6	0.0	8980.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8980.6	0.0	8980.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	17961.1	0.0	17961.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.9	0.7
10°-20°	368.9	2.1
20°-30°	665.9	3.7
30°-40°	1135.8	6.3
40°-50°	1933.8	10.8
50°-60°	3112.1	17.3
60°-70°	5175.5	28.8
70°-80°	5006.7	27.9
80°-90°	440.6	2.5
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°	17961.1	100.0
0°-180°	17961.1	100.0



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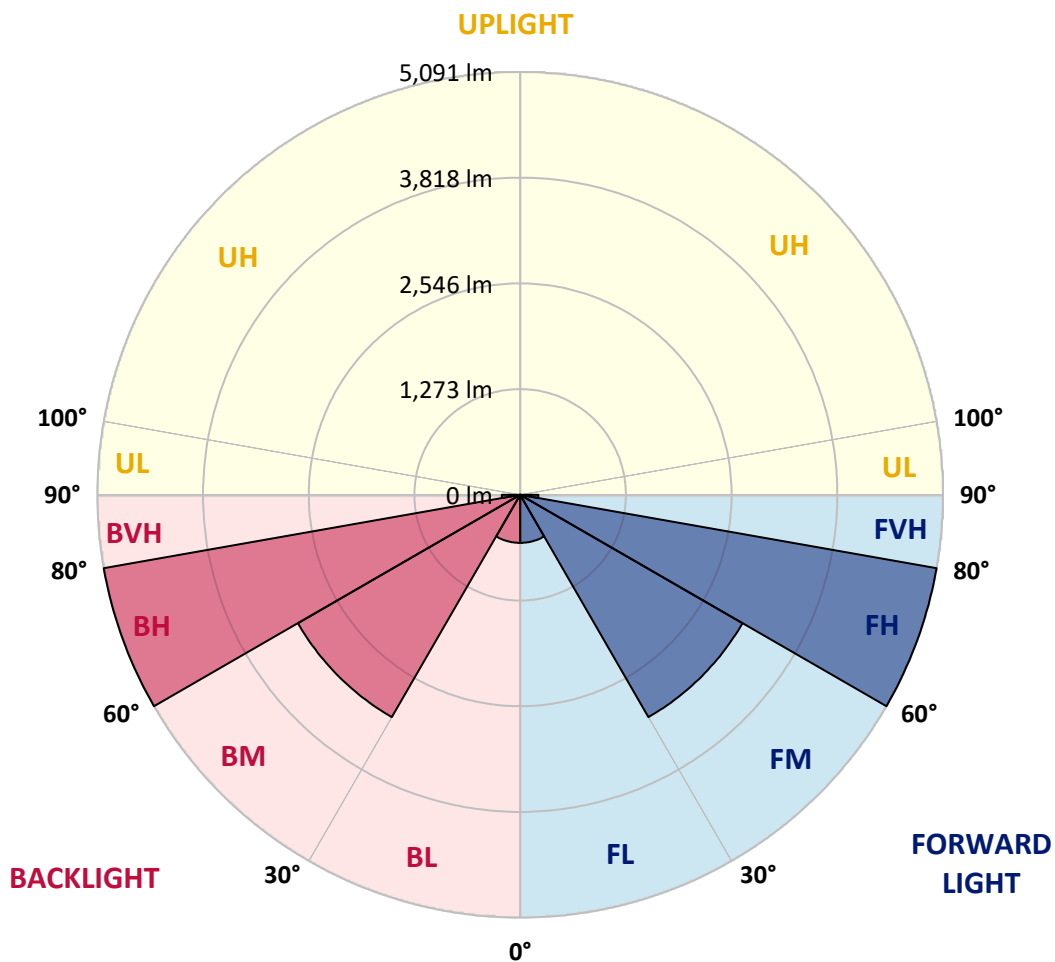
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	578.3	3.2			
FM	(30°-60°)	3090.8	17.2			
FH	(60°-80°)	5091.1	28.3			G3/7500
FVH	(80°-90°)	220.3	1.2			G2/225
BL	(0°-30°)	578.3	3.2	B2/1000		
BM	(30°-60°)	3090.8	17.2	B3/5000		
BH	(60°-80°)	5091.1	28.3	B5		G3/7500
BVH	(80°-90°)	220.3	1.2			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°	50°
0°	1276.9	1276.9	1276.9	1276.9	1276.9	1276.9	1276.9	1276.9	1276.9	1276.9	1276.9
2.5°	1286.8	1286.8	1288.0	1286.8	1284.7	1283.6	1280.3	1278.0	1275.9	1274.7	1272.4
5°	1288.0	1288.0	1289.1	1288.0	1285.7	1283.6	1281.3	1278.0	1275.9	1273.5	1272.4
7.5°	1292.4	1293.5	1294.5	1293.5	1289.1	1286.8	1283.6	1280.3	1275.9	1273.5	1271.5
10°	1301.3	1301.3	1301.3	1300.0	1296.9	1292.4	1288.0	1284.7	1279.0	1273.5	1270.3
12.5°	1307.8	1309.0	1309.0	1306.8	1302.4	1296.9	1292.4	1289.1	1284.7	1280.3	1276.9
15°	1317.9	1317.9	1316.6	1312.2	1305.6	1301.3	1298.9	1298.0	1296.9	1294.5	1291.3
17.5°	1337.7	1336.6	1333.3	1326.6	1318.9	1315.6	1313.4	1313.4	1313.4	1312.2	1310.1
20°	1366.4	1366.4	1362.0	1351.1	1344.4	1341.0	1337.7	1337.7	1337.7	1334.4	1331.1
22.5°	1412.9	1414.0	1407.4	1394.1	1385.2	1378.5	1374.1	1370.9	1367.6	1365.3	1359.9
25°	1475.8	1474.7	1467.0	1450.5	1443.8	1437.2	1428.3	1422.8	1418.5	1415.1	1408.5
27.5°	1542.2	1541.1	1532.2	1517.9	1513.5	1503.6	1496.8	1489.2	1483.6	1478.2	1471.5
30°	1627.4	1621.8	1615.2	1604.2	1601.9	1594.2	1585.4	1574.3	1565.4	1556.7	1548.9
32.5°	1703.6	1703.6	1693.7	1688.2	1692.5	1689.3	1690.4	1683.8	1678.3	1674.9	1667.2
35°	1809.7	1809.7	1805.4	1798.8	1799.8	1792.1	1791.0	1792.1	1796.5	1796.5	1787.6
37.5°	1951.3	1953.5	1939.1	1936.9	1931.4	1920.3	1914.7	1917.1	1927.0	1932.4	1920.3
40°	2127.0	2131.5	2127.0	2112.8	2106.0	2087.2	2076.3	2076.3	2084.0	2089.5	2085.1
42.5°	2300.6	2308.4	2300.6	2289.6	2284.0	2269.7	2264.2	2268.6	2278.6	2285.2	2278.6
45°	2494.1	2499.7	2489.7	2476.4	2469.8	2462.1	2458.8	2462.1	2473.2	2479.7	2477.5
47.5°	2684.2	2692.0	2679.9	2674.3	2674.3	2666.6	2675.4	2684.2	2694.1	2709.6	2703.0
50°	2869.9	2880.0	2872.2	2873.3	2882.1	2896.6	2913.2	2930.8	2948.4	2965.0	2967.3
52.5°	3035.8	3051.4	3052.4	3072.4	3100.0	3122.1	3168.5	3207.2	3249.2	3263.5	3257.0
55°	3210.5	3231.6	3259.1	3290.1	3334.2	3379.7	3458.1	3527.7	3583.1	3617.4	3611.8
57.5°	3460.4	3481.3	3510.0	3560.9	3627.3	3689.2	3796.4	3904.8	3988.8	4040.8	4015.3
60°	3784.3	3806.4	3843.9	3898.1	3984.3	4068.5	4215.4	4371.3	4501.8	4561.5	4515.1
62.5°	4213.2	4234.3	4258.5	4330.4	4426.6	4535.0	4719.5	4919.7	5085.5	5142.9	5077.8
65°	4824.5	4849.9	4857.8	4916.3	5010.2	5110.8	5309.9	5535.4	5724.4	5818.4	5688.0
67.5°	5513.3	5523.3	5554.2	5622.9	5719.0	5809.6	5966.6	6180.0	6361.3	6413.2	6273.9
70°	5916.9	5936.8	5990.9	6085.9	6201.0	6343.7	6515.0	6745.0	6950.5	6974.9	6798.0
72.5°	5552.1	5592.9	5689.1	5837.2	6078.3	6331.4	6626.5	6965.9	7261.2	7295.5	7011.4
75°	4453.1	4499.6	4614.6	4777.0	5062.3	5438.2	5864.9	6374.6	6816.8	6873.1	6497.4
77.5°	2373.6	2431.2	2598.0	2816.9	3223.7	3721.3	4235.2	4816.8	5192.7	5319.9	5049.1
80°	598.1	629.1	709.8	837.9	1113.3	1514.6	1957.9	2583.6	3050.1	3248.1	3050.1
82.5°	232.1	255.4	277.4	292.9	319.4	374.8	517.5	843.5	1136.4	1399.6	1211.6
85°	89.6	95.1	137.1	155.9	155.9	171.3	196.8	232.1	287.5	314.0	263.2
87.5°	35.4	38.6	47.5	72.9	75.2	66.4	70.7	79.6	60.8	50.8	57.5
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1276.9	1276.9	1276.9	1276.9	1276.9	1276.9	1276.9	1276.9
2.5°	1271.5	1270.3	1268.0	1269.1	1268.0	1268.0	1268.0	1268.0
5°	1270.3	1270.3	1268.0	1268.0	1268.0	1269.1	1268.0	1268.0
7.5°	1269.1	1268.0	1265.8	1264.8	1264.8	1263.6	1263.6	1263.6
10°	1267.0	1264.8	1262.5	1261.4	1261.4	1259.2	1259.2	1259.2
12.5°	1272.4	1269.1	1267.0	1265.8	1265.8	1265.8	1267.0	1267.0
15°	1288.0	1281.3	1278.0	1276.9	1278.0	1280.3	1281.3	1282.4
17.5°	1304.6	1298.0	1292.4	1290.1	1291.3	1294.5	1298.0	1300.0
20°	1325.5	1320.0	1313.4	1311.2	1311.2	1315.6	1317.9	1321.0
22.5°	1355.5	1351.1	1345.4	1342.2	1339.9	1345.4	1348.7	1351.1
25°	1403.0	1398.5	1394.1	1390.8	1389.7	1395.2	1397.5	1398.5
27.5°	1465.9	1461.5	1459.2	1458.2	1454.8	1457.1	1460.5	1459.2
30°	1547.8	1551.1	1547.8	1547.8	1542.2	1544.5	1542.2	1540.1
32.5°	1657.3	1653.9	1644.0	1637.3	1629.5	1629.5	1626.2	1623.0
35°	1766.6	1755.6	1750.1	1753.4	1750.1	1752.2	1746.8	1741.3
37.5°	1896.1	1889.3	1888.2	1898.2	1896.1	1898.2	1898.2	1890.5
40°	2067.4	2063.0	2070.7	2087.2	2093.9	2092.8	2094.9	2085.1
42.5°	2264.2	2256.5	2259.7	2274.1	2281.9	2284.0	2283.0	2274.1
45°	2460.9	2463.2	2463.2	2478.7	2486.4	2490.8	2483.1	2479.7
47.5°	2683.1	2686.6	2678.7	2688.6	2691.0	2698.6	2692.0	2686.6
50°	2939.7	2927.4	2909.8	2913.2	2913.2	2910.9	2903.1	2896.6
52.5°	3226.0	3198.3	3165.2	3154.0	3141.9	3129.8	3114.3	3102.1
55°	3552.1	3504.6	3444.9	3417.2	3393.9	3366.4	3330.9	3318.9
57.5°	3930.3	3848.3	3768.7	3719.1	3659.3	3622.9	3577.5	3575.3
60°	4379.1	4268.4	4128.2	4054.1	3994.4	3951.3	3916.9	3903.7
62.5°	4897.6	4707.4	4555.9	4476.3	4406.6	4380.1	4337.0	4342.5
65°	5429.4	5235.9	5088.8	5024.7	4959.5	4941.8	4902.1	4916.3
67.5°	6005.3	5846.1	5684.7	5624.9	5565.3	5547.7	5506.7	5518.8
70°	6521.5	6319.2	6135.8	6018.6	5916.9	5835.0	5783.1	5762.1
72.5°	6624.5	6273.9	5985.3	5692.4	5523.3	5375.2	5314.4	5291.1
75°	5952.2	5408.3	4997.0	4653.2	4463.0	4247.5	4224.3	4192.2
77.5°	4630.0	4010.9	3513.5	3071.1	2815.7	2552.8	2462.1	2393.5
80°	2761.6	2122.7	1645.1	1153.1	940.9	757.4	711.9	664.4
82.5°	988.3	633.5	426.8	332.7	297.3	274.2	256.5	233.3
85°	238.8	201.2	190.1	172.5	170.3	144.8	102.9	91.7
87.5°	76.3	69.7	70.7	67.5	70.7	53.1	43.1	38.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)