

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: P198809

Luminaire Tested: **XNV2-AF-02-LED-U-5MQ-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198809
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-5MQ-7050-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14088 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 128
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

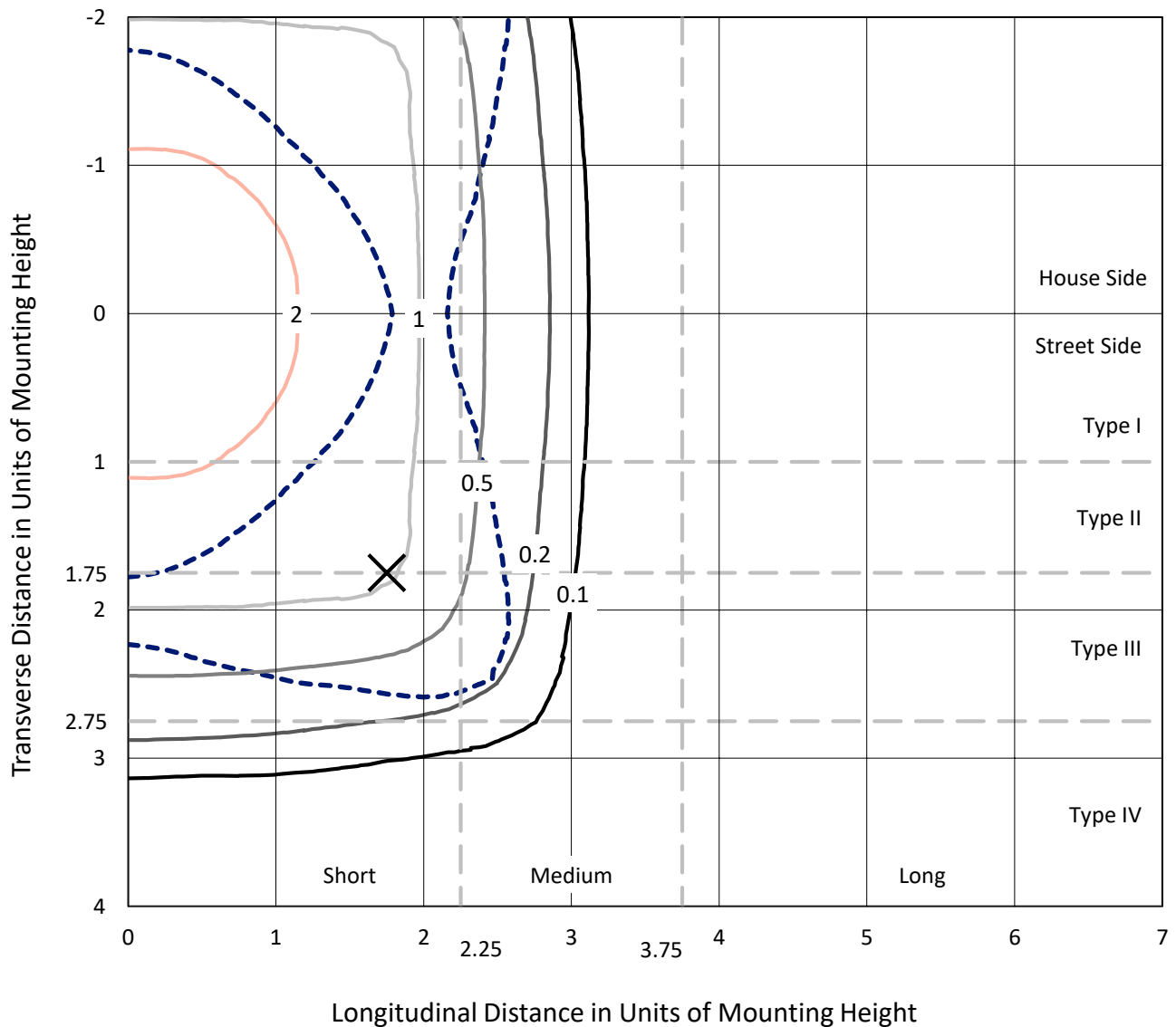


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

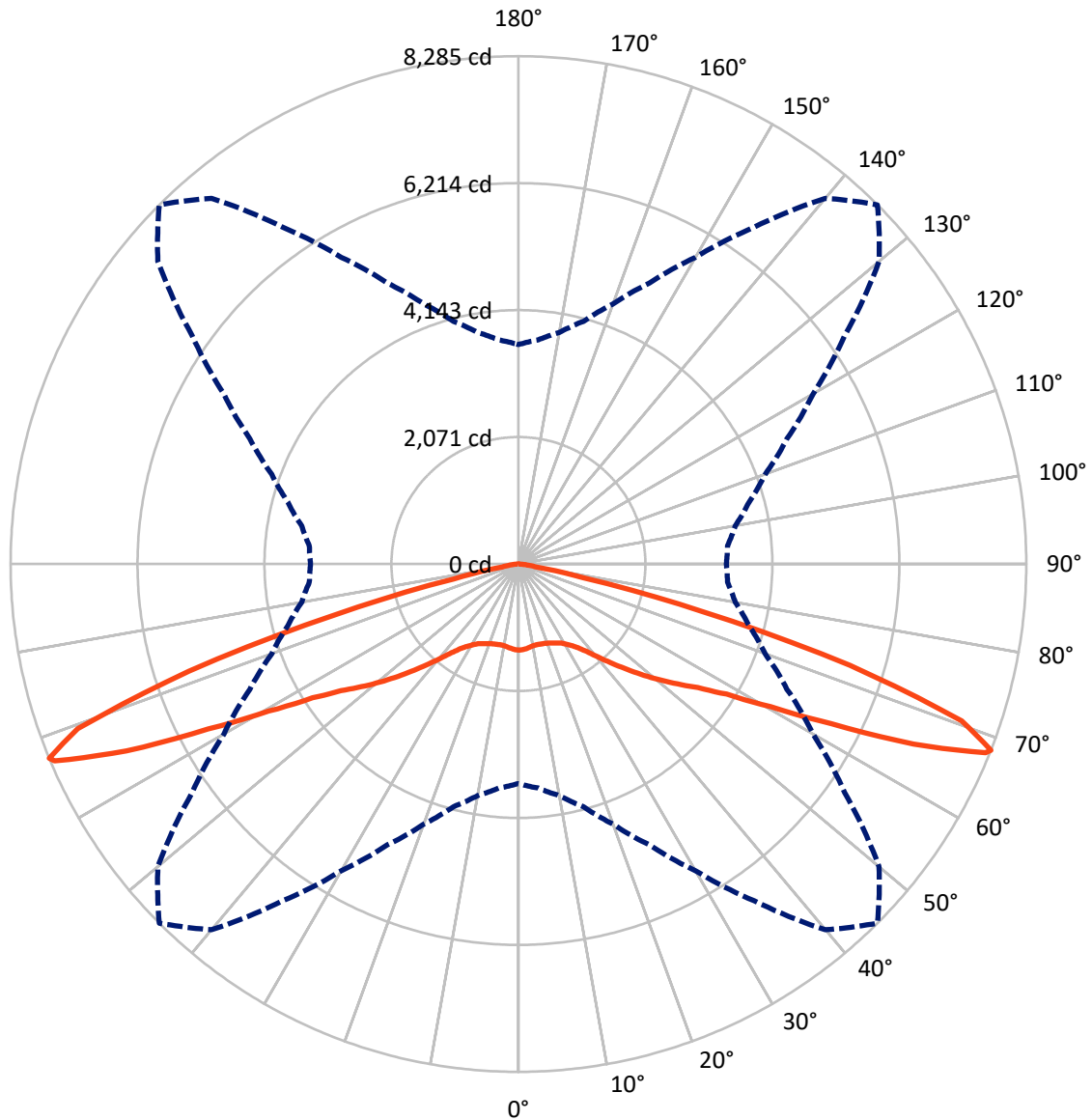


Based on 20 foot mounting height. Maximum calculated value = 3.5 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7044.0	0.0	7044.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7044.0	0.0	7044.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	14088.0	0.0	14088.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	0.9
10°-20°	381.4	2.7
20°-30°	648.4	4.6
30°-40°	1061.1	7.5
40°-50°	1896.2	13.5
50°-60°	3202.4	22.7
60°-70°	4965.8	35.2
70°-80°	1707.4	12.1
80°-90°	93.8	0.7
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°	14088.0	100.0
0°-180°	14088.0	100.0



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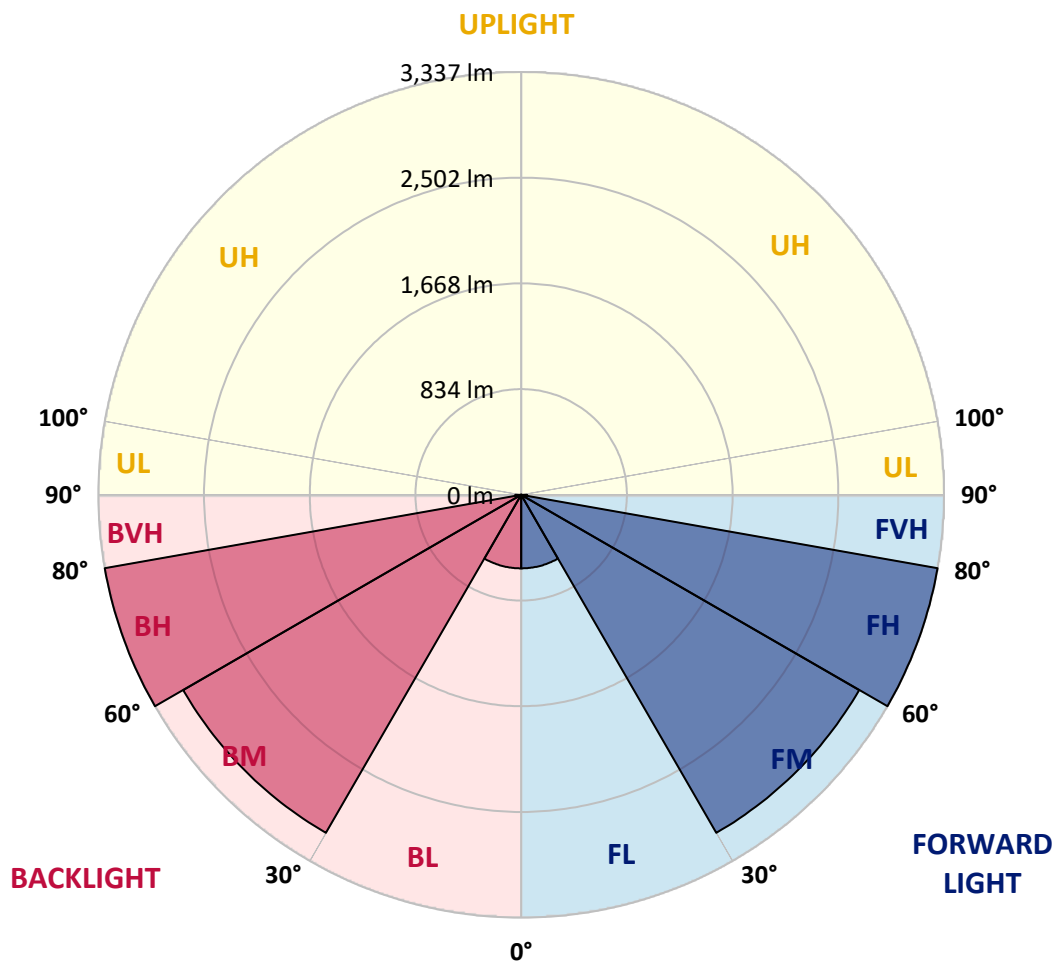
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	580.6	4.1			
FM (30°-60°)	3079.9	21.9			
FH (60°-80°)	3336.6	23.7			G2/5000
FVH (80°-90°)	46.9	0.3			G1/100
BL (0°-30°)	580.6	4.1	B2/1000		
BM (30°-60°)	3079.9	21.9	B3/5000		
BH (60°-80°)	3336.6	23.7	B4/5000		G2/5000
BVH (80°-90°)	46.9	0.3			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°	50°
0°	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3
2.5°	1411.4	1411.4	1413.1	1412.2	1409.6	1407.0	1404.5	1401.9	1400.1	1398.4	1396.7
5°	1396.7	1396.7	1399.3	1397.6	1395.8	1393.2	1391.5	1388.9	1387.2	1385.5	1386.3
7.5°	1377.7	1379.4	1381.2	1380.3	1376.9	1376.0	1373.4	1372.5	1370.8	1368.2	1369.1
10°	1361.3	1362.2	1363.9	1363.0	1362.2	1359.6	1358.7	1357.9	1357.0	1353.6	1352.7
12.5°	1344.9	1346.7	1348.4	1349.2	1348.4	1349.2	1350.1	1351.0	1350.1	1348.4	1348.4
15°	1332.0	1333.7	1336.3	1338.9	1339.8	1344.9	1348.4	1351.8	1354.4	1355.3	1352.7
17.5°	1325.1	1327.7	1331.1	1336.3	1340.6	1346.7	1352.7	1357.9	1362.2	1363.0	1360.5
20°	1324.2	1326.8	1332.0	1338.0	1345.8	1353.6	1363.0	1370.8	1375.1	1377.7	1375.1
22.5°	1330.3	1333.7	1340.6	1348.4	1357.9	1368.2	1380.3	1388.9	1397.6	1401.0	1398.4
25°	1347.5	1351.0	1358.7	1368.2	1378.6	1391.5	1403.6	1414.8	1423.4	1427.7	1424.3
27.5°	1383.8	1384.6	1393.2	1403.6	1415.7	1426.9	1442.4	1447.6	1454.5	1458.8	1454.5
30°	1434.7	1436.4	1444.1	1460.5	1471.7	1486.4	1495.0	1500.2	1508.0	1512.3	1507.1
32.5°	1512.3	1514.0	1520.9	1536.4	1546.8	1558.0	1568.4	1571.8	1579.6	1584.8	1578.7
35°	1621.9	1625.3	1631.3	1641.7	1650.3	1659.0	1666.7	1664.1	1669.3	1676.2	1670.2
37.5°	1772.0	1771.1	1772.8	1780.6	1789.2	1794.4	1806.5	1800.4	1805.6	1811.6	1808.2
40°	1947.1	1947.1	1946.2	1960.0	1963.5	1968.7	1981.6	1973.8	1980.7	1987.6	1981.6
42.5°	2146.4	2149.8	2154.1	2165.3	2174.8	2176.6	2182.6	2179.2	2187.8	2193.8	2187.8
45°	2375.8	2381.0	2386.2	2412.1	2416.4	2419.8	2424.2	2412.9	2422.4	2427.6	2425.9
47.5°	2613.9	2623.4	2634.7	2661.4	2678.6	2686.4	2689.9	2676.9	2677.8	2685.6	2686.4
50°	2883.1	2893.5	2904.7	2934.9	2951.3	2965.1	2969.4	2954.7	2956.4	2962.5	2964.2
52.5°	3131.6	3143.6	3167.8	3208.3	3231.6	3255.8	3257.5	3239.4	3247.2	3251.5	3248.0
55°	3365.3	3380.9	3412.8	3467.1	3509.4	3556.9	3578.4	3558.6	3558.6	3555.1	3553.4
57.5°	3638.0	3655.2	3688.0	3751.0	3809.6	3877.8	3936.4	3956.3	3992.5	4004.6	3985.6
60°	4048.6	4066.7	4100.4	4183.2	4257.4	4356.6	4453.2	4531.7	4659.4	4728.4	4666.3
62.5°	4423.9	4451.5	4530.8	4675.8	4836.2	5020.0	5233.1	5384.9	5617.0	5732.6	5576.4
65°	4338.5	4394.5	4549.8	4777.6	5108.8	5507.4	5941.3	6358.0	6837.7	7083.5	6766.1
67.5°	3789.8	3837.2	4004.6	4269.4	4682.7	5232.2	5906.8	6769.5	7759.0	8219.7	7658.1
68°	3580.2	3669.0	3835.5	4098.6	4515.3	5055.4	5775.7	6707.4	7787.5	8285.3	7678.8
70°	2745.1	2777.0	2936.6	3173.0	3622.4	4152.1	4879.4	5941.3	7162.0	7674.5	7050.8
72.5°	1304.4	1323.4	1426.9	1659.8	1945.4	2376.7	3018.5	4020.1	5120.1	5653.2	5031.2
75°	477.9	482.2	506.4	561.6	668.6	830.8	1138.7	1761.6	2607.9	3110.0	2618.3
77.5°	257.9	258.8	268.3	282.1	301.1	322.6	369.2	495.2	798.8	1087.0	843.7
80°	162.2	161.3	170.8	182.0	195.0	205.3	209.6	224.3	252.8	295.9	271.7
82.5°	82.8	90.6	112.1	124.2	143.2	146.7	142.3	141.5	150.1	162.2	167.4
85°	45.7	40.5	59.5	79.4	86.3	88.9	89.7	84.5	82.8	81.1	85.4
87.5°	23.3	21.6	25.9	39.7	42.3	34.5	35.4	30.2	20.7	20.7	21.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3
2.5°	1395.0	1395.8	1394.1	1394.1	1394.1	1395.0	1394.1	1393.2
5°	1383.8	1385.5	1385.5	1386.3	1387.2	1387.2	1387.2	1387.2
7.5°	1367.4	1368.2	1369.9	1369.9	1369.9	1369.9	1369.9	1369.9
10°	1351.8	1350.1	1349.2	1347.5	1347.5	1344.9	1345.8	1346.7
12.5°	1344.1	1340.6	1338.9	1336.3	1334.6	1332.0	1332.0	1332.9
15°	1347.5	1342.3	1337.2	1335.4	1333.7	1332.0	1330.3	1331.1
17.5°	1354.4	1348.4	1342.3	1338.9	1335.4	1332.9	1332.0	1332.9
20°	1369.1	1360.5	1351.0	1344.9	1338.0	1336.3	1333.7	1336.3
22.5°	1388.9	1378.6	1366.5	1355.3	1347.5	1344.1	1340.6	1343.2
25°	1413.1	1401.9	1389.8	1376.9	1368.2	1365.6	1361.3	1361.3
27.5°	1446.7	1437.2	1426.9	1414.8	1406.2	1403.6	1396.7	1396.7
30°	1500.2	1490.7	1481.2	1470.9	1462.3	1459.7	1451.0	1451.0
32.5°	1571.0	1560.6	1554.6	1545.9	1539.0	1534.7	1524.4	1523.5
35°	1665.9	1656.4	1655.5	1649.5	1642.6	1643.4	1633.1	1631.3
37.5°	1802.2	1794.4	1797.0	1791.8	1785.8	1790.9	1784.9	1784.9
40°	1976.4	1973.8	1976.4	1973.0	1973.8	1974.7	1969.5	1971.2
42.5°	2186.9	2180.0	2195.5	2193.8	2191.2	2198.1	2186.1	2177.4
45°	2429.3	2426.7	2442.3	2444.9	2439.7	2444.0	2422.4	2421.6
47.5°	2692.5	2692.5	2706.3	2704.5	2699.4	2700.2	2674.3	2657.9
50°	2966.8	2965.1	2978.9	2975.4	2968.5	2967.6	2940.9	2924.5
52.5°	3252.3	3252.3	3272.2	3262.7	3246.3	3238.5	3205.8	3184.2
55°	3568.1	3563.8	3569.8	3538.7	3506.8	3483.5	3443.0	3426.6
57.5°	3967.5	3917.5	3874.3	3834.7	3789.8	3762.2	3714.7	3697.5
60°	4534.3	4400.6	4342.8	4263.4	4189.2	4152.1	4089.1	4055.5
62.5°	5319.3	5097.6	4940.6	4765.5	4596.4	4477.4	4381.6	4339.3
65°	6226.9	5743.8	5344.4	4969.1	4650.8	4398.0	4257.4	4213.4
67.5°	6572.0	5685.1	4995.8	4457.5	4071.0	3769.9	3601.7	3566.4
68°	6498.6	5550.5	4834.5	4283.2	3895.0	3591.4	3424.0	3392.1
70°	5732.6	4682.7	3927.0	3378.3	3016.0	2727.0	2608.8	2557.9
72.5°	3908.0	3007.3	2306.8	1845.3	1574.4	1391.5	1282.8	1245.7
75°	1798.7	1215.5	811.8	606.5	515.0	471.0	437.4	428.8
77.5°	524.5	381.3	327.8	303.7	285.5	270.0	258.8	257.9
80°	249.3	233.8	226.9	211.4	195.0	180.3	169.9	171.7
82.5°	167.4	163.0	163.0	147.5	121.6	104.4	86.3	77.6
85°	88.9	92.3	97.5	92.3	80.2	59.5	38.8	42.3
87.5°	30.2	34.5	36.2	35.4	31.9	24.2	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)