

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: P271285

Luminaire Tested: **XNV2-AF-02-LED-U-5NQ-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271285  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)  
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-5NQ-7027  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V  
NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10770.8 lumens  
Efficiency: N/A  
Efficacy: 97.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

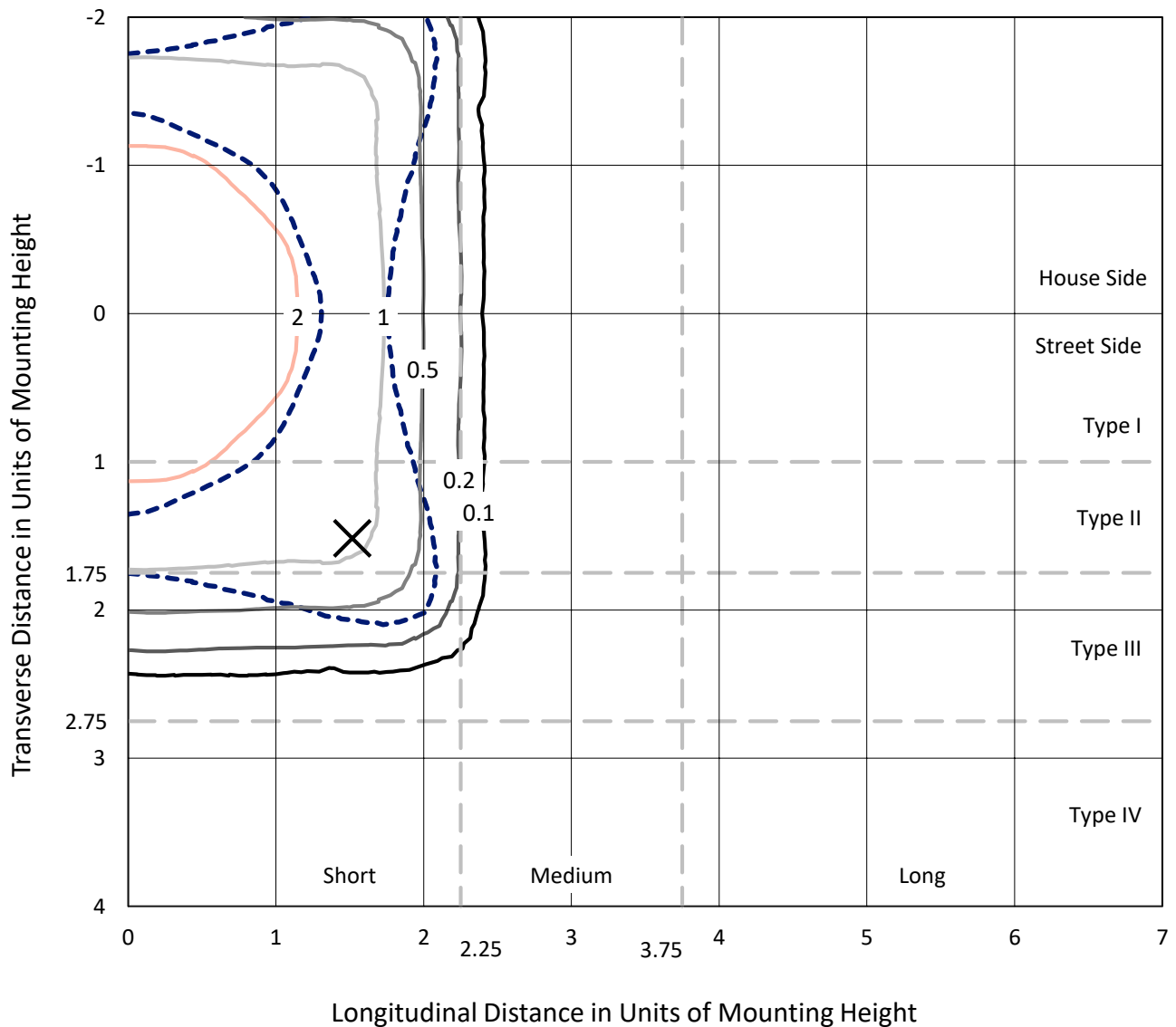
Input Watts (W): 111  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

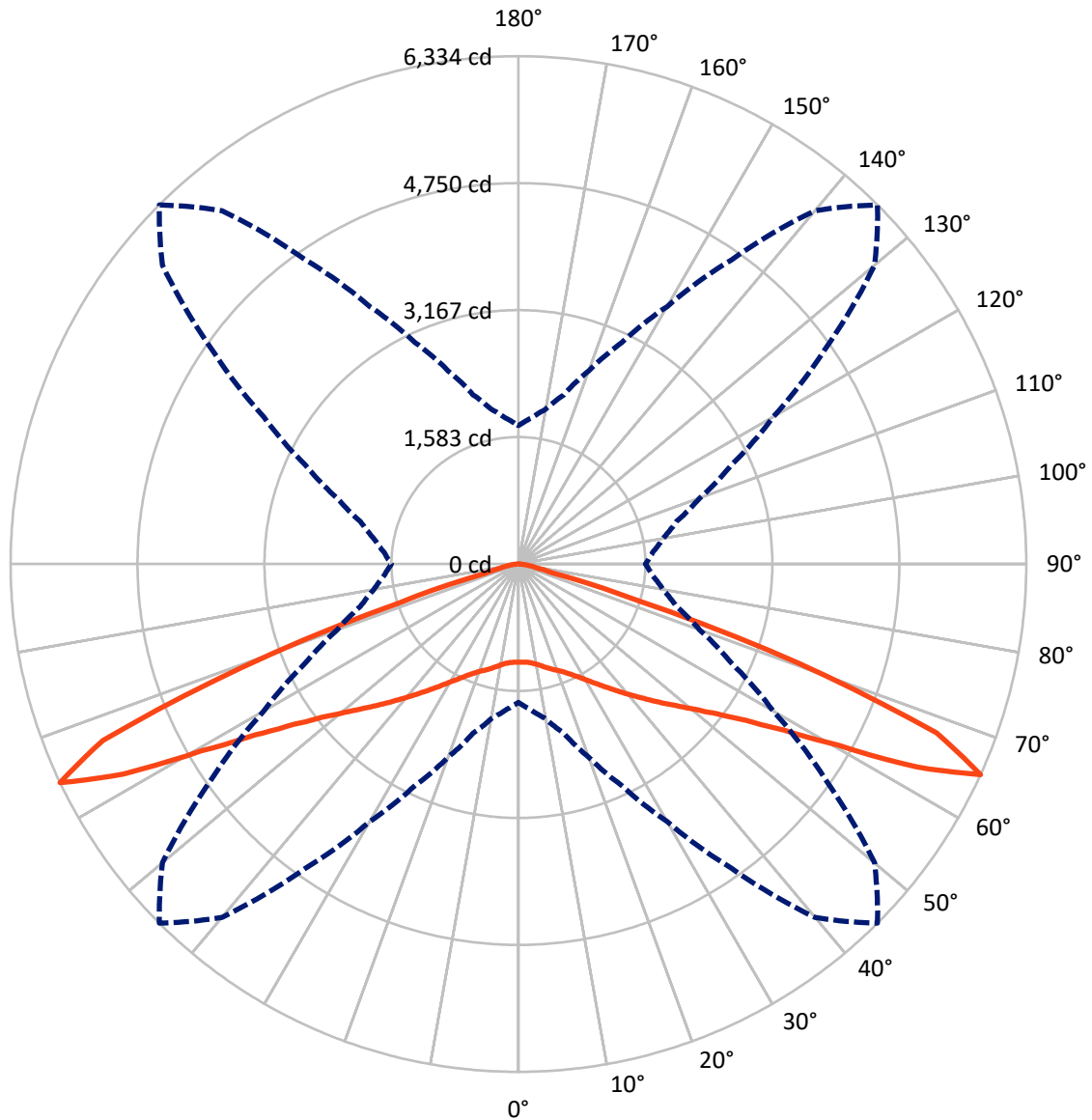
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.1 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5385.4	0.0	5385.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5385.4	0.0	5385.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	10770.8	0.0	10770.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.3	1.1
10°-20°	382.4	3.6
20°-30°	713.3	6.6
30°-40°	1202.8	11.2
40°-50°	1953.7	18.1
50°-60°	3061.1	28.4
60°-70°	2889.5	26.8
70°-80°	389.4	3.6
80°-90°	59.3	0.6
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°	10770.8	100.0
0°-180°	10770.8	100.0



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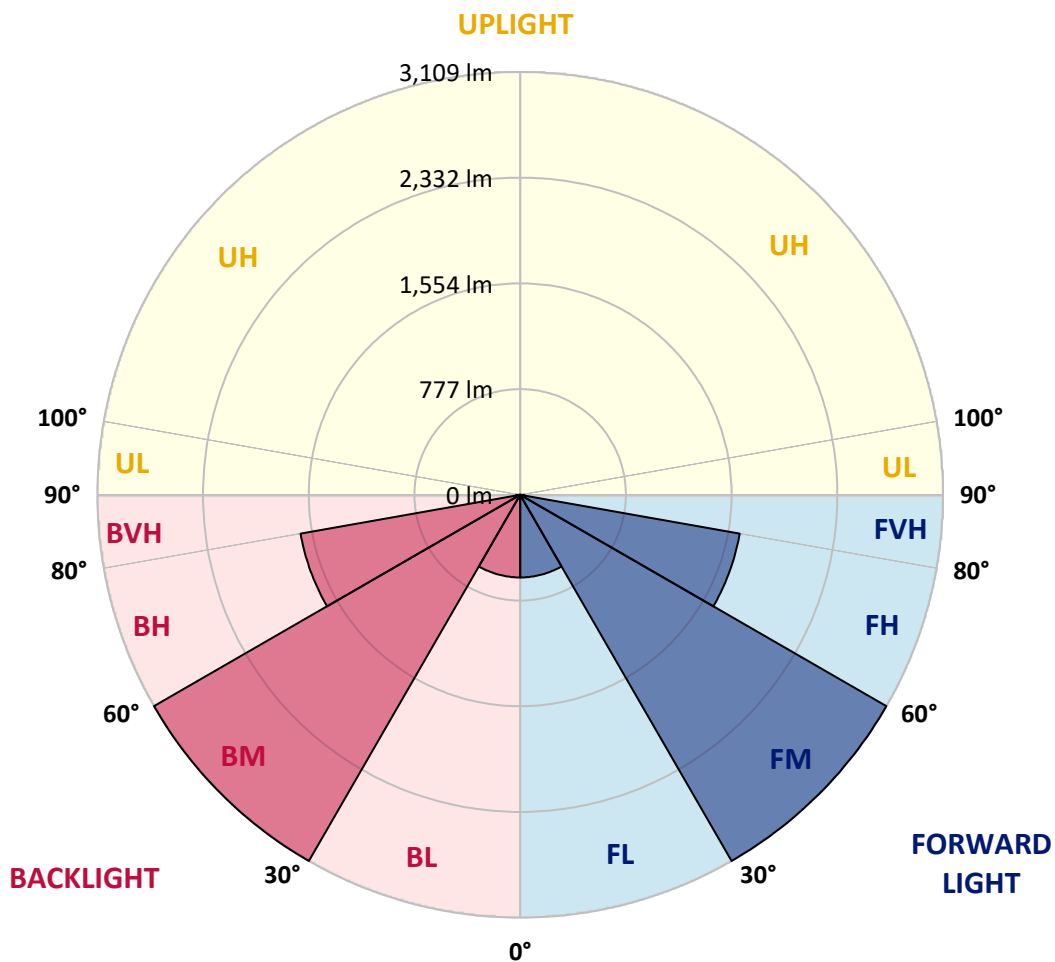
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	607.5	5.6			
FM	(30°-60°)	3108.8	28.9			
FH	(60°-80°)	1639.5	15.2			G1/1800
FVH	(80°-90°)	29.7	0.3			G1/100
BL	(0°-30°)	607.5	5.6	B2/1000		
BM	(30°-60°)	3108.8	28.9	B3/5000		
BH	(60°-80°)	1639.5	15.2	B3/2500		G1/1800
BVH	(80°-90°)	29.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1225.2	1225.2	1225.2	1225.2	1225.2	1225.2	1225.2	1225.2	1225.2	1225.2	1225.2
2.5°	1235.2	1235.2	1237.2	1236.5	1233.9	1231.8	1229.9	1227.2	1225.8	1224.5	1223.9
5°	1241.9	1241.9	1244.0	1243.3	1241.3	1238.7	1237.2	1235.2	1233.3	1231.8	1232.6
7.5°	1258.7	1259.3	1260.1	1259.3	1257.4	1255.3	1252.6	1252.0	1249.4	1247.2	1248.6
10°	1284.1	1284.1	1284.8	1285.6	1284.1	1279.5	1279.5	1278.2	1275.6	1272.8	1273.4
12.5°	1312.3	1312.3	1313.1	1313.1	1313.1	1310.4	1311.0	1310.4	1307.0	1305.6	1307.0
15°	1339.9	1340.6	1340.6	1341.9	1341.9	1342.5	1345.2	1345.2	1344.0	1343.2	1343.2
17.5°	1372.2	1373.5	1374.0	1376.2	1376.8	1378.1	1380.9	1381.6	1382.1	1380.2	1380.9
20°	1415.0	1415.6	1417.7	1418.5	1421.1	1421.1	1422.5	1421.7	1420.4	1417.7	1417.7
22.5°	1463.3	1464.6	1468.6	1468.6	1472.1	1470.0	1470.7	1468.6	1465.3	1464.0	1462.7
25°	1526.4	1528.5	1531.8	1530.4	1531.8	1528.5	1528.5	1528.5	1526.4	1524.5	1523.7
27.5°	1606.3	1602.9	1606.3	1603.6	1602.9	1600.2	1600.9	1599.5	1597.5	1596.8	1594.2
30°	1689.4	1685.4	1687.5	1688.2	1686.7	1686.1	1683.5	1681.4	1678.0	1678.8	1676.7
32.5°	1784.8	1780.7	1782.7	1783.3	1782.1	1783.3	1782.7	1778.0	1774.1	1776.7	1776.7
35°	1898.1	1895.5	1900.9	1902.8	1898.7	1896.9	1894.0	1888.7	1882.7	1886.7	1887.3
37.5°	2034.3	2031.0	2035.0	2040.4	2033.0	2028.9	2018.2	2010.1	2006.2	2008.3	2010.9
40°	2176.0	2176.6	2188.0	2189.3	2181.3	2176.6	2165.9	2153.7	2142.4	2142.4	2145.7
42.5°	2324.9	2326.9	2340.3	2344.9	2342.3	2333.5	2318.9	2304.1	2289.3	2291.9	2296.0
45°	2493.2	2490.6	2504.7	2516.2	2514.0	2511.4	2497.3	2470.5	2457.0	2456.3	2463.1
47.5°	2670.4	2675.8	2690.6	2709.9	2709.3	2702.6	2684.4	2659.6	2634.9	2636.9	2644.9
50°	2877.0	2884.5	2909.3	2928.7	2931.3	2929.5	2908.0	2879.1	2844.2	2846.2	2856.9
52.5°	3062.2	3073.0	3101.8	3142.1	3167.0	3178.4	3164.2	3137.4	3101.8	3103.9	3115.2
55°	3229.9	3246.7	3289.8	3344.7	3394.3	3440.7	3461.4	3460.8	3434.6	3440.7	3455.4
57.5°	3335.2	3358.9	3423.9	3512.5	3611.0	3704.3	3784.9	3860.6	3877.4	3909.0	3909.0
60°	3193.7	3248.8	3335.2	3487.0	3680.8	3890.2	4117.0	4337.7	4479.9	4592.0	4531.6
62.5°	2667.1	2748.3	2869.6	3069.6	3371.6	3745.3	4200.8	4714.1	5249.5	5576.9	5336.8
65°	1725.7	1827.7	1959.8	2184.6	2565.1	3046.2	3709.7	4632.3	5752.7	6333.8	5797.0
67.5°	683.7	752.8	833.3	992.9	1323.2	1795.5	2540.2	3678.2	5079.7	5628.1	5026.1
70°	326.8	338.1	353.7	387.8	470.4	634.7	1020.6	1812.2	3115.2	3692.9	3040.8
72.5°	236.2	238.2	245.5	256.9	281.1	314.6	382.5	554.3	1074.3	1562.1	1075.5
75°	179.1	181.8	185.9	191.9	204.6	220.8	246.2	295.3	367.6	424.0	367.0
77.5°	136.3	138.9	142.2	148.3	155.0	166.4	175.8	195.2	226.2	238.2	236.9
80°	99.4	104.1	109.4	114.8	119.5	124.9	125.5	134.8	152.4	163.8	160.3
82.5°	63.2	67.2	81.1	87.2	87.9	89.2	88.6	89.2	98.6	106.7	104.1
85°	40.2	42.9	50.3	57.0	55.7	58.4	58.4	57.0	53.0	45.6	54.3
87.5°	20.1	20.8	24.2	30.3	28.8	25.5	24.9	24.9	18.1	15.5	16.8
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°	1225.2	1225.2	1225.2	1225.2	1225.2	1225.2	1225.2	1225.2
2.5°	1221.9	1223.1	1221.2	1221.2	1220.4	1221.9	1219.8	1219.8
5°	1231.1	1233.3	1232.6	1232.6	1233.9	1235.2	1234.5	1233.9
7.5°	1247.9	1249.4	1250.7	1251.2	1252.6	1252.0	1253.3	1252.6
10°	1273.4	1272.1	1274.2	1272.1	1272.8	1271.5	1272.1	1272.1
12.5°	1305.6	1303.7	1302.4	1300.9	1300.9	1298.3	1298.3	1298.9
15°	1342.5	1339.3	1336.6	1335.2	1333.9	1333.9	1331.8	1333.2
17.5°	1378.8	1375.5	1370.8	1370.8	1368.7	1367.4	1366.1	1369.5
20°	1417.0	1413.8	1411.0	1410.3	1406.3	1404.9	1405.7	1409.7
22.5°	1461.4	1459.3	1459.3	1457.9	1455.3	1453.3	1453.3	1457.9
25°	1521.1	1517.1	1517.6	1518.3	1517.1	1517.1	1515.7	1519.0
27.5°	1594.2	1590.8	1592.9	1594.2	1592.9	1594.9	1592.9	1595.5
30°	1680.1	1678.0	1680.1	1682.0	1678.8	1678.8	1677.3	1679.4
32.5°	1782.7	1780.0	1781.3	1781.3	1776.7	1772.6	1767.2	1771.3
35°	1895.5	1892.1	1894.7	1896.9	1891.4	1887.3	1879.3	1882.7
37.5°	2019.6	2020.8	2024.3	2033.0	2031.6	2024.9	2018.9	2021.5
40°	2158.4	2165.2	2179.9	2185.9	2184.6	2177.9	2169.9	2171.3
42.5°	2315.6	2324.2	2339.6	2349.6	2344.9	2335.7	2325.5	2329.6
45°	2486.6	2500.0	2520.1	2530.2	2524.1	2514.0	2500.0	2507.3
47.5°	2667.6	2694.6	2721.3	2734.8	2732.9	2718.7	2700.6	2702.6
50°	2884.5	2920.0	2954.3	2967.6	2957.6	2936.1	2910.6	2909.9
52.5°	3154.2	3192.3	3220.6	3217.2	3192.3	3158.9	3130.1	3128.6
55°	3491.0	3503.7	3499.6	3470.8	3427.3	3374.9	3338.0	3332.0
57.5°	3898.3	3855.3	3792.3	3705.0	3607.1	3507.7	3440.7	3415.9
60°	4396.0	4202.2	3976.7	3739.3	3522.6	3360.1	3257.4	3195.1
62.5°	4807.4	4245.7	3741.9	3329.3	2991.7	2791.2	2651.0	2564.4
65°	4666.4	3668.0	2938.0	2406.0	2037.6	1830.3	1682.0	1583.4
67.5°	3605.1	2450.9	1705.5	1182.2	896.4	758.9	662.9	600.4
70°	1817.6	939.9	569.6	401.9	343.5	319.3	303.3	293.8
72.5°	533.5	356.3	295.9	261.6	240.8	226.2	216.8	212.0
75°	295.3	240.8	212.7	193.2	179.8	169.8	163.8	159.7
77.5°	203.2	175.1	161.1	148.3	137.5	130.2	125.5	121.5
80°	142.2	128.2	122.1	115.4	107.3	101.2	94.6	91.9
82.5°	94.6	88.6	87.2	81.8	77.2	70.4	58.4	54.3
85°	55.7	55.1	55.1	53.0	49.6	43.6	34.9	34.9
87.5°	19.5	20.1	20.8	22.2	21.5	18.1	14.7	14.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)