

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: P198649

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198649  
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-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 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: 14411.3 lumens  
Efficiency: N/A  
Efficacy: 112.6 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

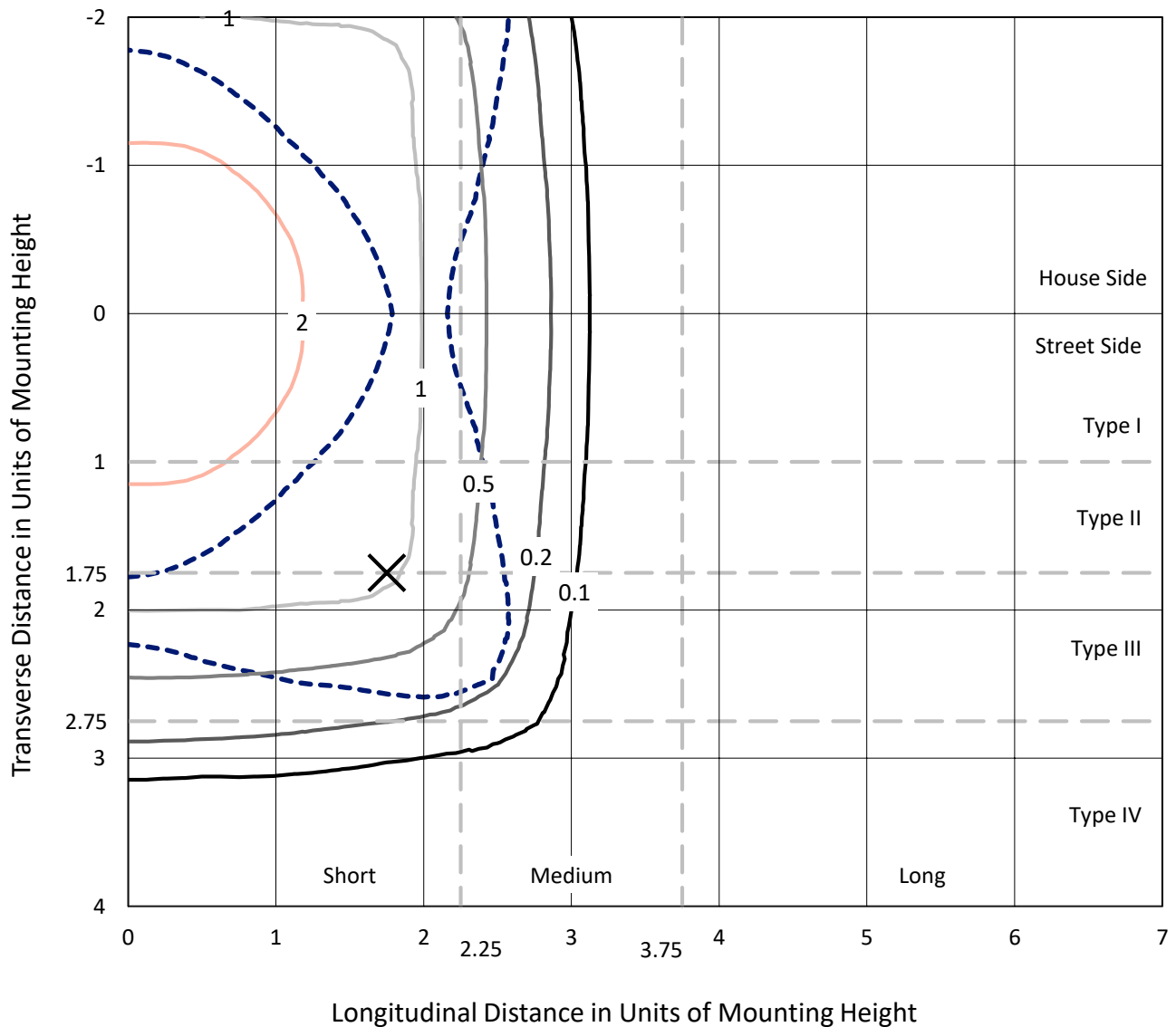


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

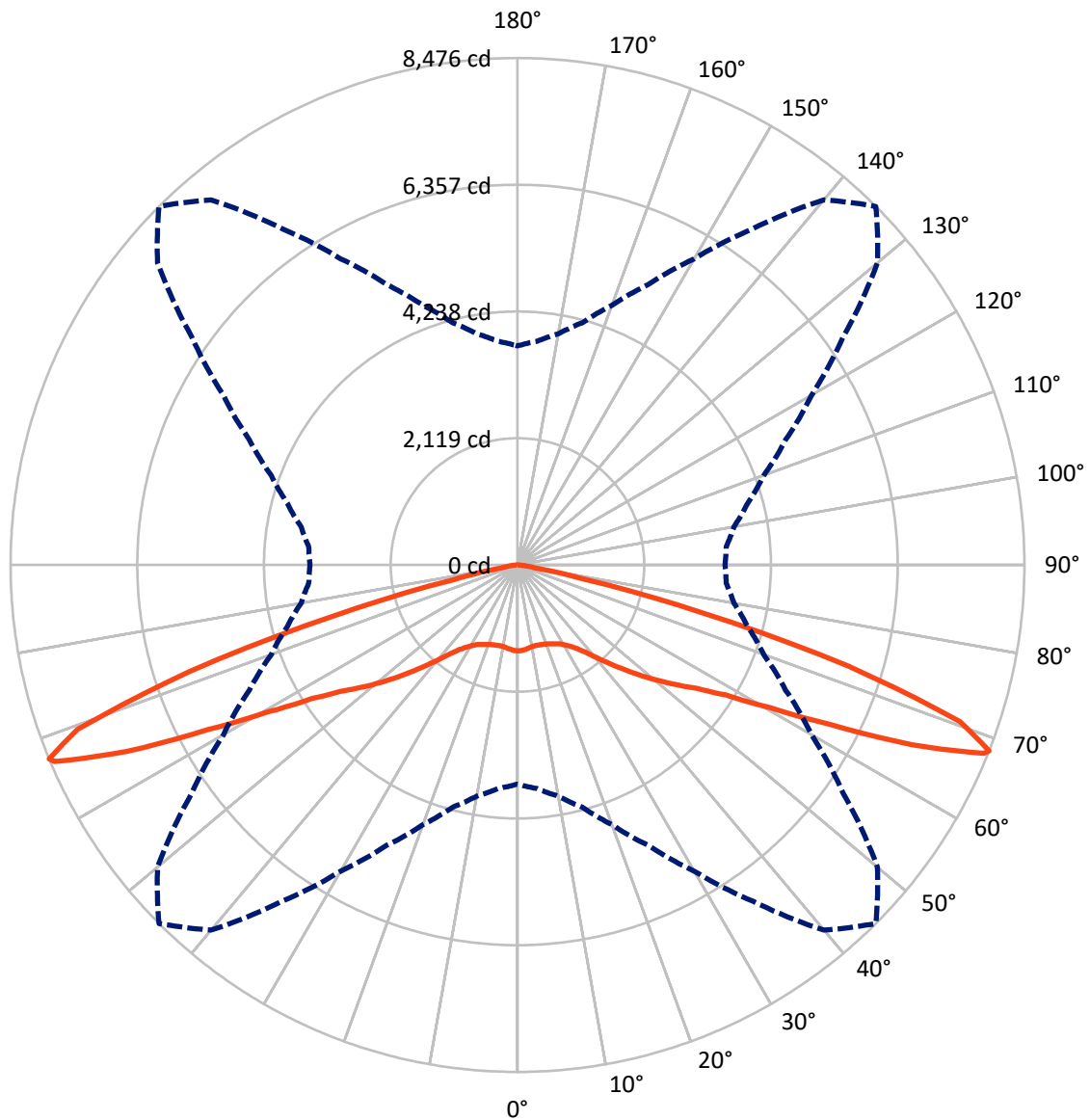


Based on 20 foot mounting height. Maximum calculated value = 3.6 fc  
 Type V - Short - Full Cutoff

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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
<b>House Side</b>	Lumens	7205.7	0.0	7205.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7205.7	0.0	7205.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	14411.3	0.0	14411.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.5	0.9
10°-20°	390.1	2.7
20°-30°	663.3	4.6
30°-40°	1085.4	7.5
40°-50°	1939.8	13.5
50°-60°	3275.9	22.7
60°-70°	5079.8	35.2
70°-80°	1746.5	12.1
80°-90°	96.0	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°	14411.3	100.0
0°-180°	14411.3	100.0



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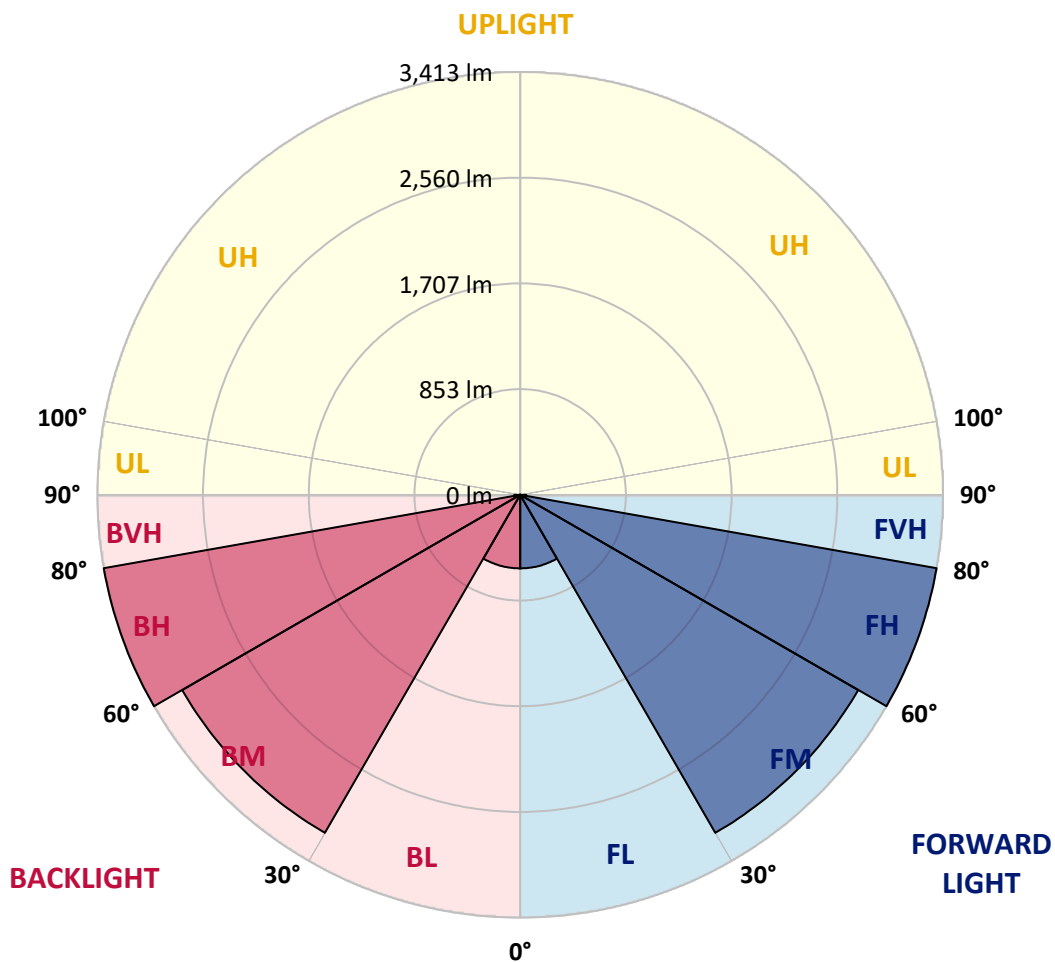
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	594.0	4.1			
FM	(30°-60°)	3150.6	21.9			
FH	(60°-80°)	3413.2	23.7			G2/5000
FVH	(80°-90°)	48.0	0.3			G1/100
BL	(0°-30°)	594.0	4.1	B2/1000		
BM	(30°-60°)	3150.6	21.9	B3/5000		
BH	(60°-80°)	3413.2	23.7	B4/5000		G2/5000
BVH	(80°-90°)	48.0	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°	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6
2.5°	1443.8	1443.8	1445.5	1444.6	1442.0	1439.3	1436.7	1434.1	1432.2	1430.5	1428.8
5°	1428.8	1428.8	1431.4	1429.7	1427.8	1425.2	1423.4	1420.8	1419.0	1417.3	1418.1
7.5°	1409.3	1411.1	1412.9	1412.0	1408.5	1407.6	1404.9	1404.0	1402.3	1399.6	1400.5
10°	1392.5	1393.5	1395.2	1394.3	1393.5	1390.8	1389.9	1389.1	1388.1	1384.7	1383.7
12.5°	1375.8	1377.6	1379.3	1380.2	1379.3	1380.2	1381.1	1382.0	1381.1	1379.3	1379.3
15°	1362.6	1364.3	1367.0	1369.6	1370.5	1375.8	1379.3	1382.8	1385.5	1386.4	1383.7
17.5°	1355.5	1358.2	1361.6	1367.0	1371.4	1377.6	1383.7	1389.1	1393.5	1394.3	1391.7
20°	1354.6	1357.3	1362.6	1368.7	1376.7	1384.7	1394.3	1402.3	1406.7	1409.3	1406.7
22.5°	1360.8	1364.3	1371.4	1379.3	1389.1	1399.6	1412.0	1420.8	1429.7	1433.2	1430.5
25°	1378.4	1382.0	1389.9	1399.6	1410.2	1423.4	1435.8	1447.3	1456.1	1460.5	1457.0
27.5°	1415.6	1416.4	1425.2	1435.8	1448.2	1459.6	1475.5	1480.8	1487.9	1492.3	1487.9
30°	1467.6	1469.4	1477.2	1494.0	1505.5	1520.5	1529.3	1534.6	1542.6	1547.0	1541.7
32.5°	1547.0	1548.7	1555.8	1571.7	1582.3	1593.8	1604.4	1607.9	1615.9	1621.2	1614.9
35°	1659.1	1662.6	1668.7	1679.4	1688.2	1697.1	1705.0	1702.3	1707.6	1714.7	1708.5
37.5°	1812.7	1811.7	1813.5	1821.5	1830.3	1835.6	1848.0	1841.7	1847.0	1853.2	1849.7
40°	1991.8	1991.8	1990.9	2005.0	2008.6	2013.9	2027.1	2019.1	2026.2	2033.2	2027.1
42.5°	2195.7	2199.1	2203.5	2215.0	2224.7	2226.6	2232.7	2229.2	2238.0	2244.1	2238.0
45°	2430.3	2435.6	2441.0	2467.5	2471.9	2475.3	2479.8	2468.3	2478.0	2483.3	2481.6
47.5°	2673.9	2683.6	2695.2	2722.5	2740.1	2748.1	2751.6	2738.3	2739.3	2747.2	2748.1
50°	2949.3	2959.9	2971.4	3002.3	3019.0	3033.2	3037.6	3022.5	3024.3	3030.5	3032.2
52.5°	3203.5	3215.7	3240.5	3281.9	3305.8	3330.5	3332.3	3313.7	3321.7	3326.1	3322.5
55°	3442.5	3458.5	3491.1	3546.7	3589.9	3638.5	3660.5	3640.3	3640.3	3636.7	3635.0
57.5°	3721.5	3739.1	3772.6	3837.1	3897.0	3966.8	4026.7	4047.1	4084.1	4096.5	4077.1
60°	4141.5	4160.0	4194.5	4279.2	4355.1	4456.6	4555.4	4635.7	4766.3	4836.9	4773.4
62.5°	4525.4	4553.7	4634.8	4783.1	4947.2	5135.2	5353.2	5508.5	5745.9	5864.2	5704.4
65°	4438.1	4495.4	4654.2	4887.2	5226.1	5633.8	6077.7	6503.9	6994.6	7246.1	6921.4
67.5°	3876.8	3925.3	4096.5	4367.4	4790.2	5352.3	6042.4	6924.9	7937.1	8408.3	7833.9
68°	3662.4	3753.2	3923.5	4192.7	4618.9	5171.4	5908.3	6861.3	7966.2	8475.5	7855.0
70°	2808.1	2840.7	3004.0	3245.8	3705.5	4247.4	4991.4	6077.7	7326.4	7850.6	7212.6
72.5°	1334.3	1353.8	1459.6	1697.9	1990.0	2431.2	3087.8	4112.4	5237.6	5782.9	5146.7
75°	488.9	493.3	518.0	574.5	683.9	849.9	1164.8	1802.0	2667.8	3181.4	2678.4
77.5°	263.8	264.7	274.5	288.6	308.0	330.0	377.7	506.6	817.1	1111.9	863.1
80°	165.9	165.0	174.7	186.2	199.5	210.0	214.4	229.4	258.6	302.7	277.9
82.5°	84.7	92.7	114.7	127.1	146.5	150.1	145.6	144.7	153.5	165.9	171.2
85°	46.7	41.4	60.9	81.2	88.3	90.9	91.8	86.4	84.7	83.0	87.4
87.5°	23.8	22.1	26.5	40.6	43.3	35.3	36.2	30.9	21.2	21.2	22.1
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°	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6	1437.6
2.5°	1427.0	1427.8	1426.1	1426.1	1426.1	1427.0	1426.1	1425.2
5°	1415.6	1417.3	1417.3	1418.1	1419.0	1419.0	1419.0	1419.0
7.5°	1398.8	1399.6	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3
10°	1382.8	1381.1	1380.2	1378.4	1378.4	1375.8	1376.7	1377.6
12.5°	1374.9	1371.4	1369.6	1367.0	1365.2	1362.6	1362.6	1363.5
15°	1378.4	1373.1	1367.9	1366.0	1364.3	1362.6	1360.8	1361.6
17.5°	1385.5	1379.3	1373.1	1369.6	1366.0	1363.5	1362.6	1363.5
20°	1400.5	1391.7	1382.0	1375.8	1368.7	1367.0	1364.3	1367.0
22.5°	1420.8	1410.2	1397.9	1386.4	1378.4	1374.9	1371.4	1374.0
25°	1445.5	1434.1	1421.7	1408.5	1399.6	1396.9	1392.5	1392.5
27.5°	1479.9	1470.2	1459.6	1447.3	1438.5	1435.8	1428.8	1428.8
30°	1534.6	1524.9	1515.2	1504.7	1495.9	1493.2	1484.3	1484.3
32.5°	1607.1	1596.4	1590.3	1581.4	1574.3	1569.9	1559.4	1558.5
35°	1704.1	1694.4	1693.5	1687.4	1680.3	1681.1	1670.6	1668.7
37.5°	1843.6	1835.6	1838.2	1832.9	1826.8	1832.0	1825.9	1825.9
40°	2021.8	2019.1	2021.8	2018.3	2019.1	2020.0	2014.7	2016.4
42.5°	2237.1	2230.0	2245.9	2244.1	2241.5	2248.5	2236.3	2227.4
45°	2485.1	2482.4	2498.4	2501.0	2495.7	2500.1	2478.0	2477.2
47.5°	2754.3	2754.3	2768.4	2766.6	2761.4	2762.2	2735.7	2718.9
50°	3034.9	3033.2	3047.3	3043.7	3036.6	3035.7	3008.4	2991.6
52.5°	3326.9	3326.9	3347.3	3337.6	3320.8	3312.8	3279.4	3257.3
55°	3650.0	3645.6	3651.7	3619.9	3587.3	3563.4	3522.0	3505.2
57.5°	4058.6	4007.4	3963.2	3922.7	3876.8	3848.5	3800.0	3782.4
60°	4638.4	4501.6	4442.5	4361.2	4285.3	4247.4	4182.9	4148.6
62.5°	5441.4	5214.6	5054.0	4874.9	4701.9	4580.2	4482.2	4438.9
65°	6369.8	5875.6	5467.1	5083.1	4757.5	4498.9	4355.1	4310.1
67.5°	6722.8	5815.6	5110.5	4559.8	4164.4	3856.4	3684.4	3648.3
68°	6647.7	5677.9	4945.5	4381.5	3984.4	3673.8	3502.6	3470.0
70°	5864.2	4790.2	4017.1	3455.8	3085.2	2789.6	2668.7	2616.6
72.5°	3997.7	3076.3	2359.7	1887.7	1610.5	1423.4	1312.2	1274.3
75°	1840.0	1243.4	830.4	620.4	526.8	481.8	447.4	438.6
77.5°	536.5	390.1	335.3	310.7	292.1	276.2	264.7	263.8
80°	255.0	239.2	232.1	216.3	199.5	184.4	173.8	175.6
82.5°	171.2	166.7	166.7	150.9	124.4	106.8	88.3	79.4
85°	90.9	94.4	99.7	94.4	82.0	60.9	39.7	43.3
87.5°	30.9	35.3	37.0	36.2	32.6	24.8	18.5	18.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)