

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: P198817

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198817
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-7050-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13600 lumens
Efficiency: N/A
Efficacy: 106.3 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 - 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

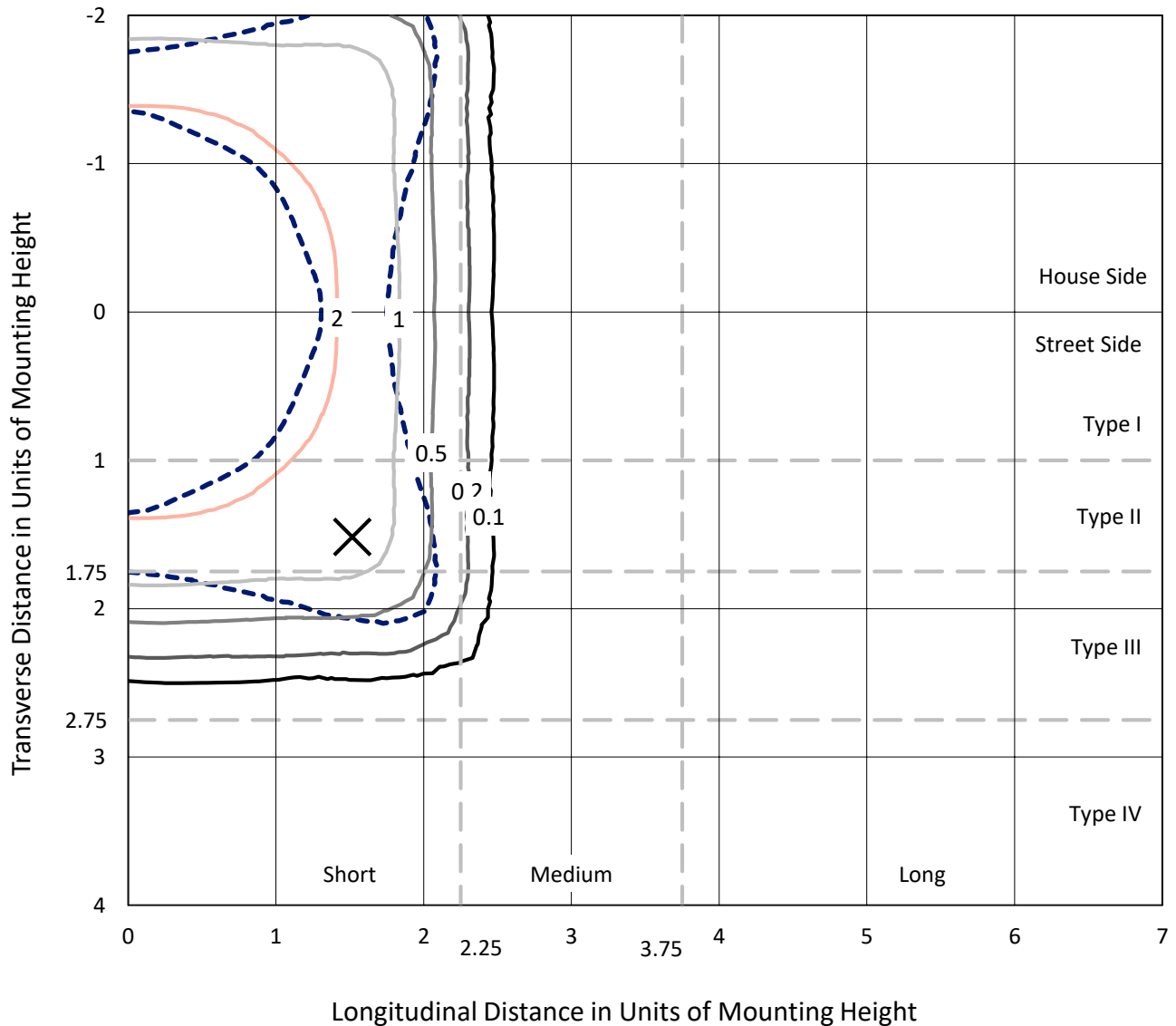


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Iso-Footcandle Lines of Horizontal Illumination

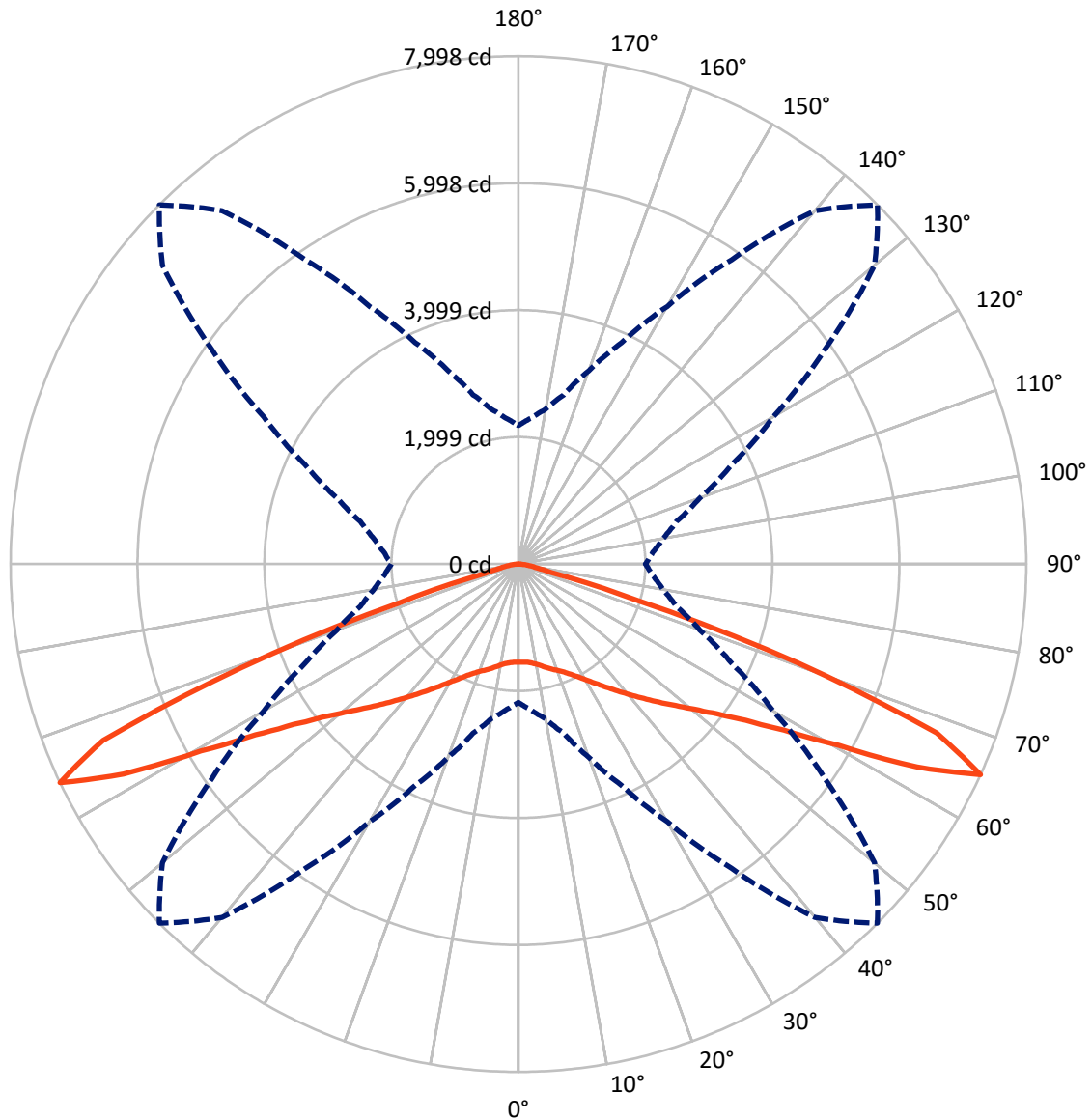
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.9 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
House Side	Lumens	6800.0	0.0	6800.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6800.0	0.0	6800.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	13600.0	0.0	13600.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.6	1.1
10°-20°	482.8	3.6
20°-30°	900.7	6.6
30°-40°	1518.7	11.2
40°-50°	2466.9	18.1
50°-60°	3865.1	28.4
60°-70°	3648.5	26.8
70°-80°	491.7	3.6
80°-90°	74.9	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°	13600.0	100.0
0°-180°	13600.0	100.0



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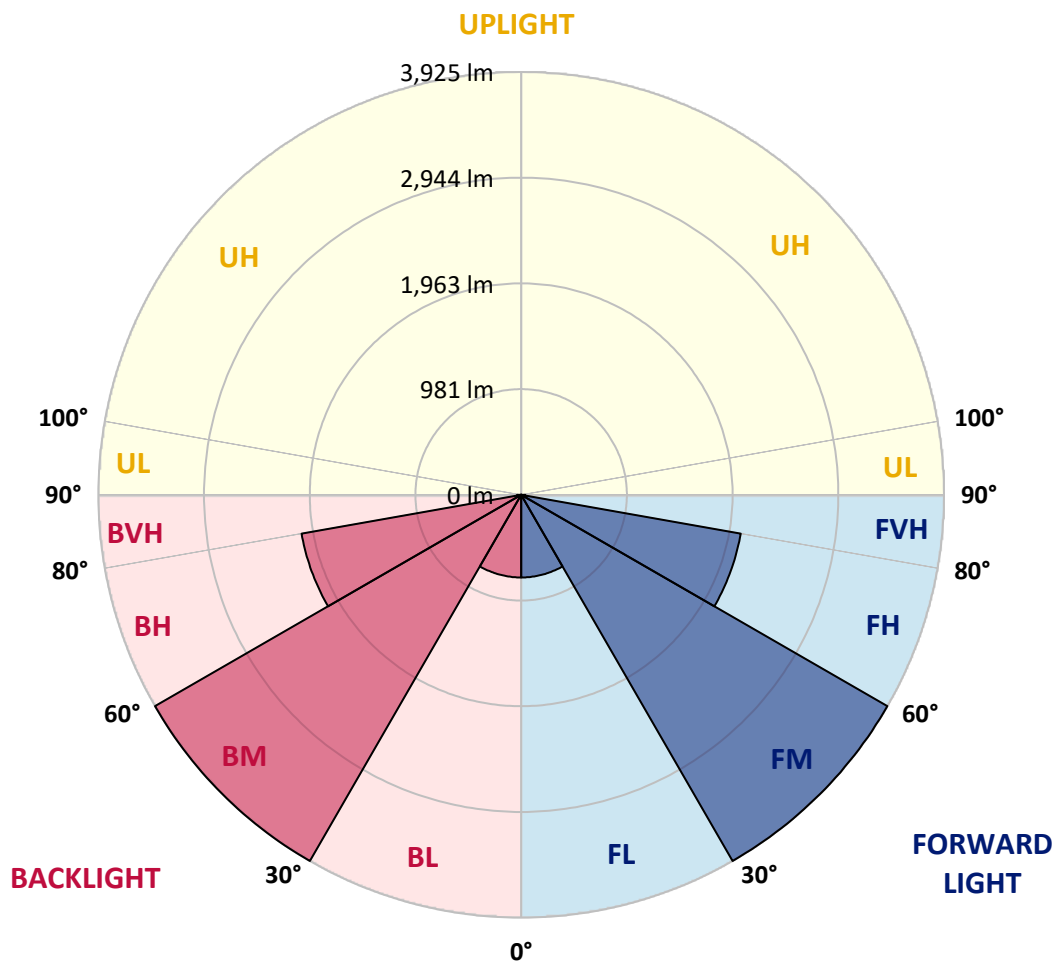
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	767.1	5.6			
FM	(30°-60°)	3925.4	28.9			
FH	(60°-80°)	2070.1	15.2			G2/5000
FVH	(80°-90°)	37.4	0.3			G1/100
BL	(0°-30°)	767.1	5.6	B2/1000		
BM	(30°-60°)	3925.4	28.9	B3/5000		
BH	(60°-80°)	2070.1	15.2	B3/2500		G2/5000
BVH	(80°-90°)	37.4	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-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1547.0	1547.0	1547.0	1547.0	1547.0	1547.0	1547.0	1547.0	1547.0	1547.0	1547.0
2.5°	1559.7	1559.7	1562.2	1561.4	1558.0	1555.5	1552.9	1549.5	1547.8	1546.1	1545.3
5°	1568.2	1568.2	1570.7	1569.9	1567.3	1563.9	1562.2	1559.7	1557.2	1555.5	1556.3
7.5°	1589.3	1590.2	1591.0	1590.2	1587.6	1585.1	1581.7	1580.9	1577.5	1574.9	1576.6
10°	1621.5	1621.5	1622.4	1623.2	1621.5	1615.6	1615.6	1613.9	1610.5	1607.1	1608.0
12.5°	1657.1	1657.1	1658.0	1658.0	1658.0	1654.6	1655.4	1654.6	1650.3	1648.6	1650.3
15°	1691.9	1692.7	1692.7	1694.4	1694.4	1695.2	1698.6	1698.6	1696.9	1696.1	1696.1
17.5°	1732.5	1734.2	1735.1	1737.6	1738.5	1740.1	1743.5	1744.4	1745.2	1742.7	1743.5
20°	1786.7	1787.6	1790.1	1791.0	1794.4	1794.4	1796.1	1795.2	1793.5	1790.1	1790.1
22.5°	1847.7	1849.4	1854.5	1854.5	1858.8	1856.2	1857.1	1854.5	1850.3	1848.6	1846.9
25°	1927.4	1929.9	1934.2	1932.5	1934.2	1929.9	1929.9	1929.9	1927.4	1924.8	1924.0
27.5°	2028.2	2024.0	2028.2	2024.8	2024.0	2020.6	2021.4	2019.7	2017.2	2016.3	2012.9
30°	2133.2	2128.2	2130.7	2131.6	2129.9	2129.0	2125.6	2123.1	2118.8	2119.7	2117.1
32.5°	2253.5	2248.5	2251.0	2251.9	2250.2	2251.9	2251.0	2245.1	2240.0	2243.4	2243.4
35°	2396.7	2393.3	2400.1	2402.7	2397.6	2395.0	2391.6	2384.9	2377.2	2382.3	2383.2
37.5°	2568.7	2564.5	2569.6	2576.3	2567.0	2561.9	2548.4	2538.2	2533.1	2535.7	2539.1
40°	2747.5	2748.3	2762.7	2764.4	2754.2	2748.3	2734.8	2719.5	2705.1	2705.1	2709.3
42.5°	2935.5	2938.1	2955.0	2961.0	2957.6	2946.6	2927.9	2909.3	2890.6	2894.0	2899.1
45°	3148.2	3144.8	3162.6	3177.0	3174.5	3171.1	3153.3	3119.4	3102.4	3101.6	3110.1
47.5°	3371.8	3378.6	3397.3	3421.8	3421.0	3412.5	3389.6	3358.3	3326.9	3329.5	3339.7
50°	3632.8	3642.1	3673.5	3698.0	3701.4	3698.9	3671.8	3635.3	3591.3	3593.8	3607.4
52.5°	3866.6	3880.2	3916.6	3967.4	3998.8	4013.2	3995.4	3961.5	3916.6	3919.1	3933.5
55°	4078.4	4099.6	4153.8	4223.3	4286.0	4344.4	4370.7	4369.8	4336.8	4344.4	4363.1
57.5°	4211.4	4241.1	4323.3	4435.1	4559.6	4677.4	4779.0	4874.8	4896.0	4935.8	4935.8
60°	4032.7	4102.1	4211.4	4402.9	4647.7	4912.1	5198.4	5477.1	5656.7	5798.2	5722.0
62.5°	3367.6	3470.1	3623.5	3875.9	4257.2	4729.1	5304.3	5952.4	6628.5	7041.9	6738.6
65°	2179.0	2307.8	2474.7	2758.5	3238.8	3846.3	4684.2	5849.1	7263.9	7997.6	7319.8
67.5°	863.3	950.6	1052.2	1253.9	1670.7	2267.1	3207.5	4644.3	6414.1	7106.3	6346.4
70°	412.6	427.0	446.5	489.7	593.9	801.4	1288.6	2288.3	3933.5	4663.0	3839.5
72.5°	298.2	300.8	310.1	324.5	355.0	397.3	482.9	699.8	1356.4	1972.3	1358.1
75°	226.2	229.6	234.7	242.3	258.4	278.7	310.9	372.8	464.3	535.4	463.4
77.5°	172.0	175.4	179.6	187.2	195.7	210.1	222.0	246.5	285.5	300.8	299.1
80°	125.4	131.3	138.1	144.9	150.8	157.6	158.4	170.3	192.3	206.7	202.5
82.5°	79.6	84.7	102.5	110.1	111.0	112.7	111.8	112.7	124.5	134.7	131.3
85°	50.8	54.2	63.5	72.0	70.3	73.7	73.7	72.0	66.9	57.6	68.6
87.5°	25.4	26.3	30.5	38.1	36.4	32.2	31.3	31.3	22.9	19.5	21.2
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°	1547.0	1547.0	1547.0	1547.0	1547.0	1547.0	1547.0	1547.0
2.5°	1542.7	1544.4	1541.9	1541.9	1541.1	1542.7	1540.2	1540.2
5°	1554.6	1557.2	1556.3	1556.3	1558.0	1559.7	1558.8	1558.0
7.5°	1575.8	1577.5	1579.2	1580.0	1581.7	1580.9	1582.6	1581.7
10°	1608.0	1606.3	1608.8	1606.3	1607.1	1605.4	1606.3	1606.3
12.5°	1648.6	1646.1	1644.4	1642.7	1642.7	1639.3	1639.3	1640.2
15°	1695.2	1691.0	1687.6	1685.9	1684.2	1684.2	1681.7	1683.4
17.5°	1741.0	1736.8	1730.8	1730.8	1728.3	1726.6	1724.9	1729.1
20°	1789.3	1785.0	1781.7	1780.8	1775.7	1774.0	1774.9	1780.0
22.5°	1845.2	1842.7	1842.7	1841.0	1837.6	1835.0	1835.0	1841.0
25°	1920.6	1915.5	1916.4	1917.2	1915.5	1915.5	1913.8	1918.1
27.5°	2012.9	2008.7	2011.2	2012.9	2011.2	2013.8	2011.2	2014.6
30°	2121.4	2118.8	2121.4	2123.9	2119.7	2119.7	2118.0	2120.5
32.5°	2251.0	2247.6	2249.3	2249.3	2243.4	2238.3	2231.5	2236.6
35°	2393.3	2389.1	2392.5	2395.0	2388.3	2383.2	2373.0	2377.2
37.5°	2550.1	2551.8	2556.0	2567.0	2565.3	2556.8	2549.2	2552.6
40°	2725.4	2733.9	2752.5	2760.2	2758.5	2750.0	2739.8	2741.5
42.5°	2923.7	2934.7	2954.2	2966.9	2961.0	2949.1	2936.4	2941.5
45°	3139.7	3156.7	3182.1	3194.8	3187.2	3174.5	3156.7	3166.0
47.5°	3368.5	3402.3	3436.2	3453.2	3450.6	3432.8	3410.0	3412.5
50°	3642.1	3687.0	3730.2	3747.2	3734.4	3707.3	3675.1	3674.3
52.5°	3982.7	4031.0	4066.6	4062.3	4031.0	3988.6	3952.2	3950.5
55°	4408.0	4424.1	4419.0	4382.6	4327.5	4261.4	4214.8	4207.2
57.5°	4922.2	4868.0	4788.4	4678.2	4554.5	4429.2	4344.4	4313.1
60°	5550.8	5306.0	5021.3	4721.4	4447.8	4242.8	4113.1	4034.4
62.5°	6070.2	5361.1	4724.8	4203.8	3777.7	3524.3	3347.3	3238.0
65°	5892.3	4631.6	3709.9	3038.1	2572.9	2311.2	2123.9	1999.4
67.5°	4552.0	3094.8	2153.6	1492.8	1131.9	958.2	837.0	758.2
70°	2295.1	1186.9	719.3	507.5	433.8	403.3	382.9	371.1
72.5°	673.5	449.9	373.6	330.4	304.1	285.5	273.6	267.7
75°	372.8	304.1	268.6	244.0	227.0	214.3	206.7	201.6
77.5°	256.7	221.1	203.3	187.2	173.7	164.4	158.4	153.3
80°	179.6	161.8	154.2	145.7	135.6	127.9	119.5	116.1
82.5°	119.5	111.8	110.1	103.4	97.4	89.0	73.7	68.6
85°	70.3	69.5	69.5	66.9	62.7	55.1	44.1	44.1
87.5°	24.6	25.4	26.3	28.0	27.1	22.9	18.6	17.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)