

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: P271288

Luminaire Tested: **XNV2-AF-02-LED-U-5NQ-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271288
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-7027-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 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: 11816 lumens
Efficiency: N/A
Efficacy: 92.3 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 - G1

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

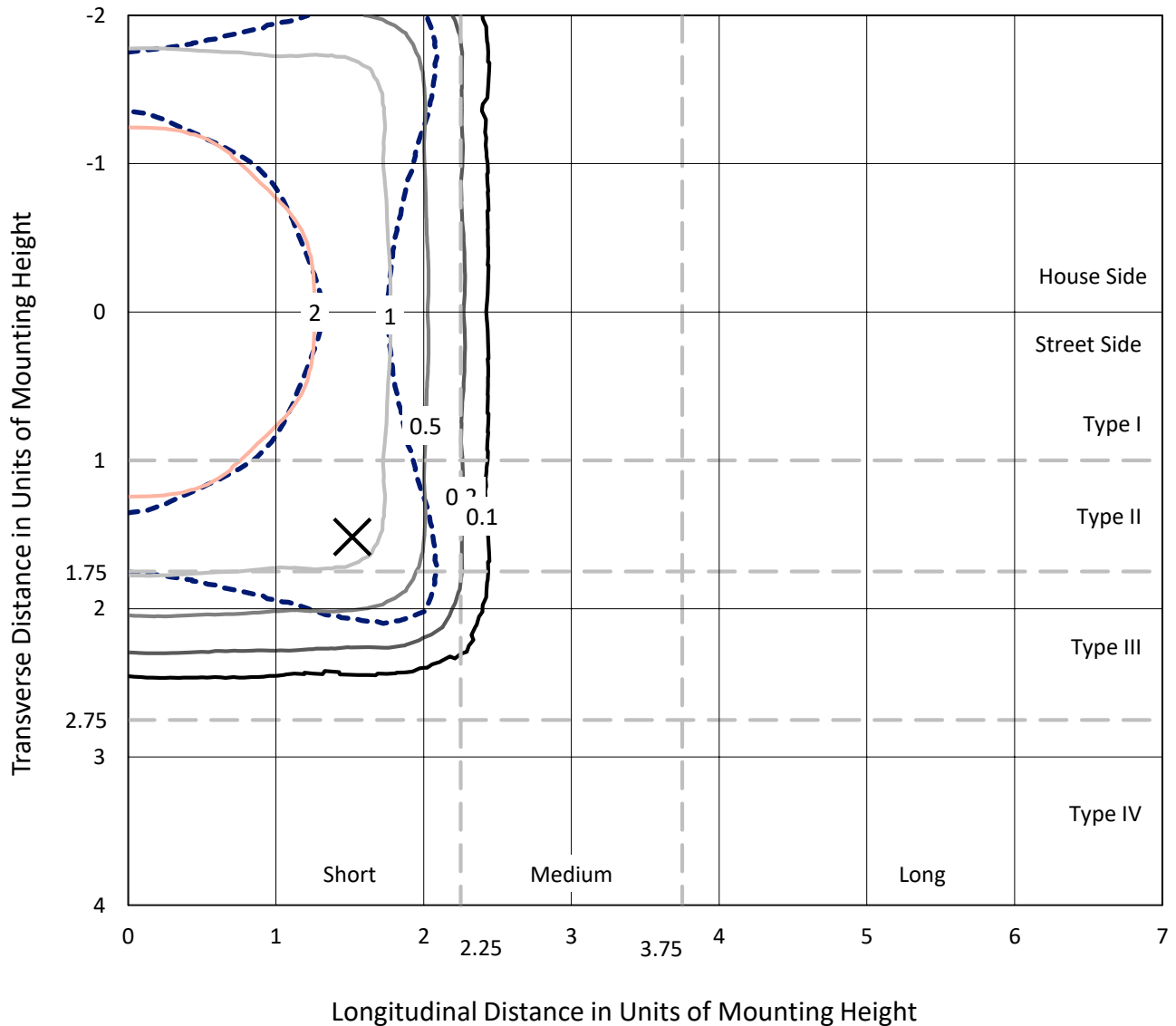


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Iso-Footcandle Lines of Horizontal Illumination

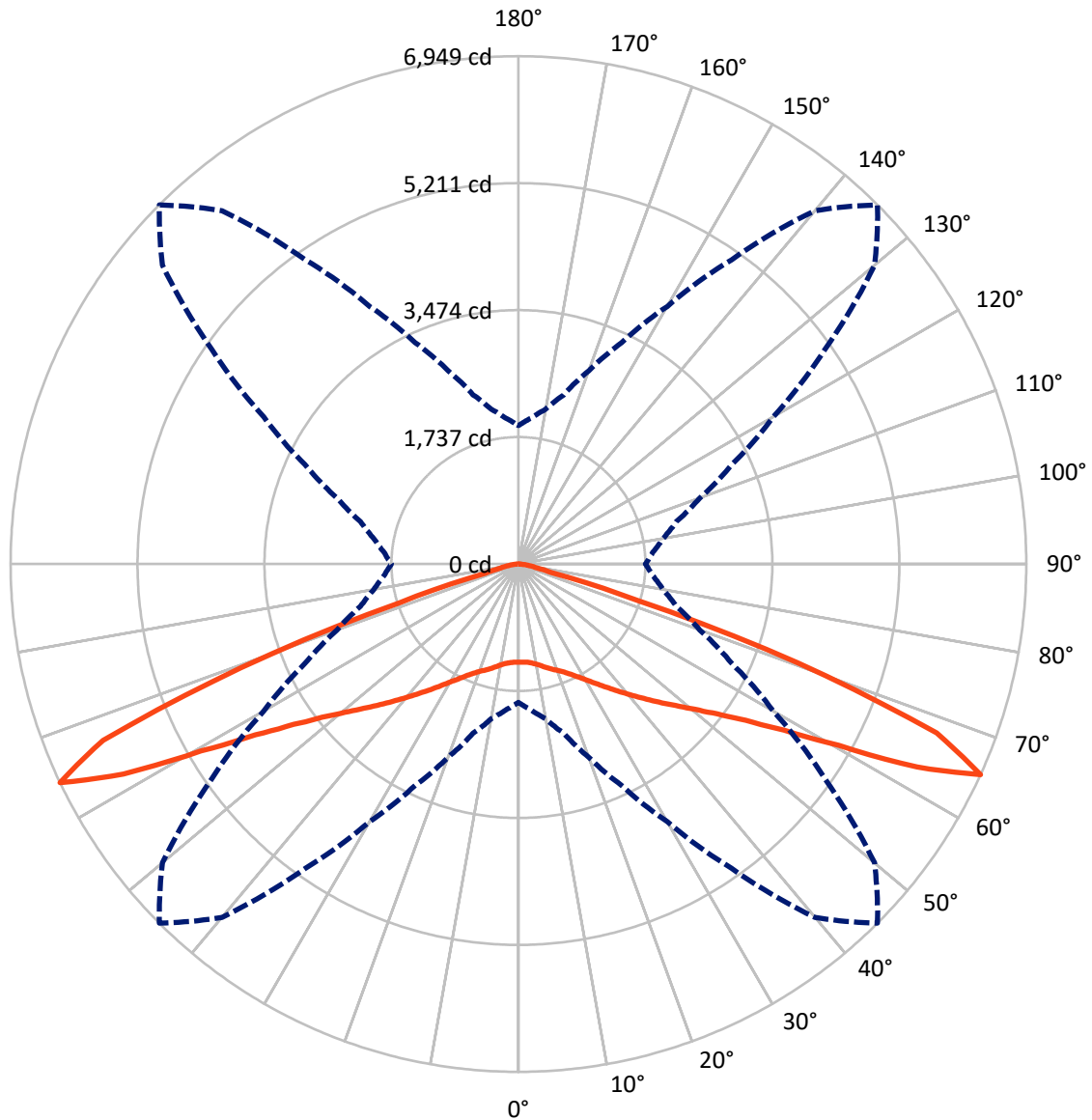
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.4 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	5908.0	0.0	5908.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5908.0	0.0	5908.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	11816.0	0.0	11816.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.9	1.1
10°-20°	419.5	3.6
20°-30°	782.6	6.6
30°-40°	1319.5	11.2
40°-50°	2143.3	18.1
50°-60°	3358.1	28.4
60°-70°	3169.9	26.8
70°-80°	427.2	3.6
80°-90°	65.1	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°	11816.0	100.0
0°-180°	11816.0	100.0



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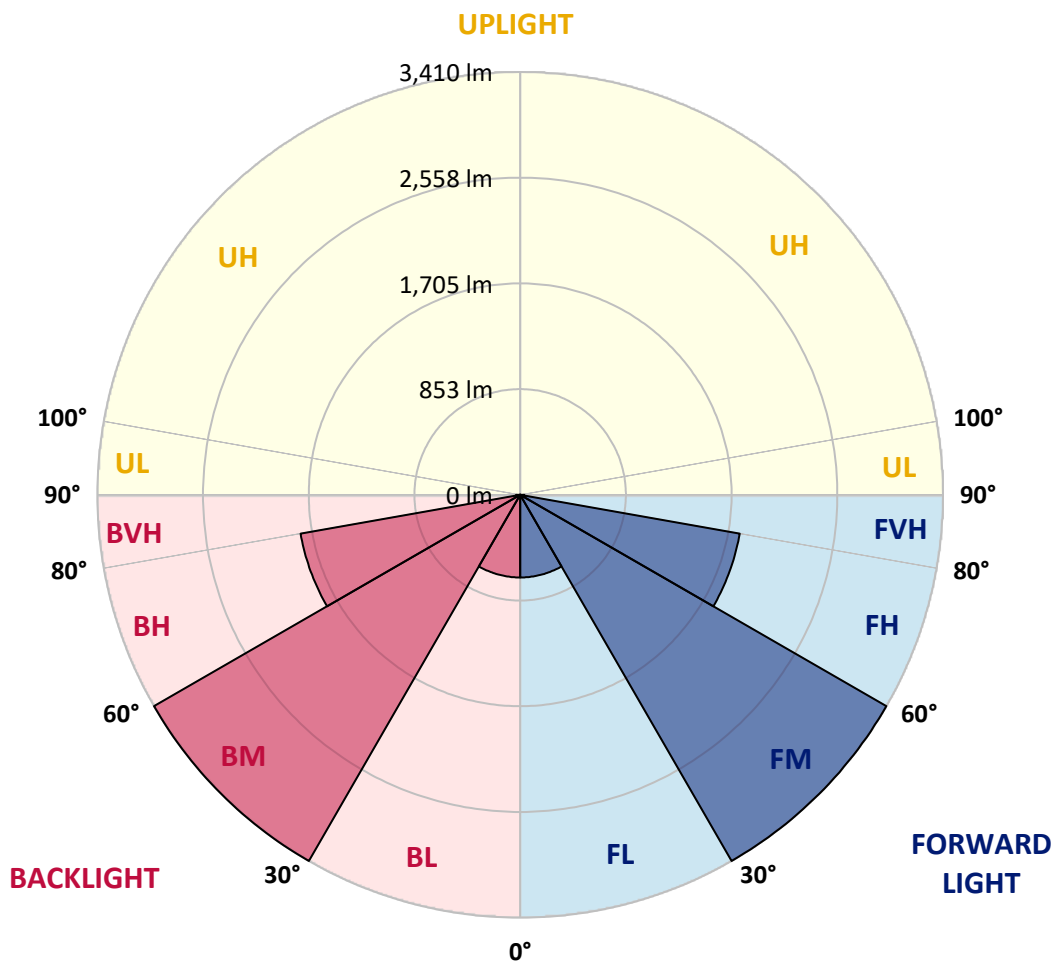
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	666.5	5.6			
FM	(30°-60°)	3410.5	28.9			
FH	(60°-80°)	1798.6	15.2			G1/1800
FVH	(80°-90°)	32.5	0.3			G1/100
BL	(0°-30°)	666.5	5.6	B2/1000		
BM	(30°-60°)	3410.5	28.9	B3/5000		
BH	(60°-80°)	1798.6	15.2	B3/2500		G1/1800
BVH	(80°-90°)	32.5	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°	1344.0	1344.0	1344.0	1344.0	1344.0	1344.0	1344.0	1344.0	1344.0	1344.0	1344.0
2.5°	1355.2	1355.2	1357.2	1356.6	1353.7	1351.4	1349.3	1346.3	1344.9	1343.3	1342.5
5°	1362.5	1362.5	1364.6	1363.9	1361.7	1358.7	1357.2	1355.2	1352.8	1351.4	1352.2
7.5°	1380.9	1381.7	1382.3	1381.7	1379.3	1377.2	1374.2	1373.5	1370.5	1368.4	1369.8
10°	1408.8	1408.8	1409.6	1410.2	1408.8	1403.7	1403.7	1402.3	1399.3	1396.3	1397.0
12.5°	1439.8	1439.8	1440.5	1440.5	1440.5	1437.6	1438.2	1437.6	1433.9	1432.3	1433.9
15°	1469.9	1470.6	1470.6	1472.1	1472.1	1473.0	1475.8	1475.8	1474.4	1473.6	1473.6
17.5°	1505.3	1506.7	1507.4	1509.7	1510.4	1511.8	1514.8	1515.6	1516.2	1514.2	1514.8
20°	1552.5	1553.1	1555.3	1556.0	1559.0	1559.0	1560.4	1559.7	1558.3	1555.3	1555.3
22.5°	1605.5	1606.9	1611.3	1611.3	1615.0	1612.7	1613.4	1611.3	1607.5	1606.1	1604.6
25°	1674.6	1676.7	1680.5	1679.0	1680.5	1676.7	1676.7	1676.7	1674.6	1672.4	1671.7
27.5°	1762.1	1758.4	1762.1	1759.2	1758.4	1755.5	1756.2	1754.7	1752.6	1751.9	1748.9
30°	1853.5	1849.0	1851.1	1851.9	1850.5	1849.7	1846.7	1844.6	1840.8	1841.6	1839.4
32.5°	1957.9	1953.5	1955.7	1956.5	1955.0	1956.5	1955.7	1950.6	1946.2	1949.1	1949.1
35°	2082.4	2079.3	2085.2	2087.5	2083.1	2080.8	2077.9	2072.0	2065.5	2069.9	2070.6
37.5°	2231.7	2228.1	2232.5	2238.3	2230.3	2225.9	2214.1	2205.2	2200.8	2203.1	2206.0
40°	2387.1	2387.9	2400.4	2401.8	2392.9	2387.9	2376.0	2362.8	2350.2	2350.2	2354.0
42.5°	2550.5	2552.8	2567.4	2572.6	2569.6	2560.1	2543.9	2527.7	2511.5	2514.4	2518.8
45°	2735.2	2732.3	2747.7	2760.2	2758.1	2755.1	2739.7	2710.1	2695.5	2694.7	2702.1
47.5°	2929.6	2935.4	2951.7	2973.0	2972.2	2964.9	2945.1	2917.8	2890.6	2892.7	2901.5
50°	3156.3	3164.4	3191.6	3213.0	3215.9	3213.6	3190.2	3158.5	3120.3	3122.4	3134.1
52.5°	3359.4	3371.2	3402.9	3446.9	3474.3	3486.7	3471.3	3441.9	3402.9	3405.0	3417.6
55°	3543.5	3561.8	3608.9	3669.2	3723.7	3774.6	3797.3	3796.6	3767.9	3774.6	3790.8
57.5°	3658.9	3684.8	3756.2	3853.3	3961.5	4063.8	4152.1	4235.4	4253.7	4288.4	4288.4
60°	3503.7	3564.0	3658.9	3825.3	4038.2	4267.8	4516.5	4758.7	4914.7	5037.6	4971.4
62.5°	2925.9	3014.9	3148.2	3367.6	3698.7	4108.8	4608.6	5171.6	5759.0	6118.1	5854.8
65°	1893.2	2005.0	2150.1	2396.7	2814.0	3341.8	4069.7	5081.8	6311.0	6948.5	6359.6
67.5°	750.1	825.9	914.1	1089.4	1451.5	1969.8	2786.7	4035.1	5572.7	6174.1	5513.8
70°	358.5	371.0	387.9	425.4	515.9	696.4	1119.6	1988.0	3417.6	4051.4	3335.9
72.5°	259.2	261.2	269.4	281.9	308.4	345.2	419.6	608.1	1178.4	1713.5	1180.0
75°	196.5	199.5	203.8	210.6	224.4	242.2	270.1	323.8	403.3	465.2	402.6
77.5°	149.4	152.4	156.0	162.7	170.0	182.5	192.9	214.2	248.0	261.2	259.8
80°	109.0	114.1	120.0	125.9	131.1	136.9	137.6	148.0	167.1	179.7	175.9
82.5°	69.2	73.7	89.0	95.7	96.4	97.8	97.1	97.8	108.2	117.0	114.1
85°	44.1	47.2	55.2	62.5	61.1	64.0	64.0	62.5	58.1	50.0	59.6
87.5°	22.1	22.7	26.5	33.1	31.6	27.9	27.2	27.2	19.9	16.9	18.3
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°	1344.0	1344.0	1344.0	1344.0	1344.0	1344.0	1344.0	1344.0
2.5°	1340.5	1341.9	1339.6	1339.6	1339.0	1340.5	1338.1	1338.1
5°	1350.7	1352.8	1352.2	1352.2	1353.7	1355.2	1354.4	1353.7
7.5°	1369.0	1370.5	1372.0	1372.8	1374.2	1373.5	1374.9	1374.2
10°	1397.0	1395.5	1397.9	1395.5	1396.3	1394.9	1395.5	1395.5
12.5°	1432.3	1430.2	1428.8	1427.2	1427.2	1424.4	1424.4	1425.0
15°	1473.0	1469.2	1466.3	1464.7	1463.2	1463.2	1461.2	1462.6
17.5°	1512.7	1509.0	1503.9	1503.9	1501.5	1500.1	1498.6	1502.3
20°	1554.5	1551.0	1548.0	1547.2	1542.7	1541.3	1542.1	1546.5
22.5°	1603.1	1601.0	1601.0	1599.5	1596.6	1594.3	1594.3	1599.5
25°	1668.7	1664.3	1665.0	1665.7	1664.3	1664.3	1662.9	1666.4
27.5°	1748.9	1745.1	1747.5	1748.9	1747.5	1749.5	1747.5	1750.3
30°	1843.1	1840.8	1843.1	1845.3	1841.6	1841.6	1840.2	1842.3
32.5°	1955.7	1952.7	1954.3	1954.3	1949.1	1944.7	1938.8	1943.3
35°	2079.3	2075.8	2078.7	2080.8	2074.9	2070.6	2061.7	2065.5
37.5°	2215.6	2217.0	2220.7	2230.3	2228.9	2221.5	2214.9	2217.7
40°	2367.9	2375.3	2391.5	2398.1	2396.7	2389.3	2380.5	2381.9
42.5°	2540.1	2549.7	2566.6	2577.7	2572.6	2562.2	2551.2	2555.7
45°	2727.9	2742.5	2764.7	2775.8	2769.0	2758.1	2742.5	2750.7
47.5°	2926.6	2956.1	2985.4	3000.2	2998.1	2982.6	2962.7	2964.9
50°	3164.4	3203.4	3240.9	3255.6	3244.6	3221.1	3193.0	3192.3
52.5°	3460.2	3502.2	3533.2	3529.4	3502.2	3465.4	3433.9	3432.3
55°	3829.7	3843.8	3839.4	3807.6	3759.9	3702.5	3661.9	3655.4
57.5°	4276.7	4229.5	4160.3	4064.7	3957.2	3848.2	3774.6	3747.3
60°	4822.7	4610.0	4362.7	4102.1	3864.4	3686.3	3573.5	3505.1
62.5°	5273.9	4657.8	4105.1	3652.4	3282.1	3062.1	2908.3	2813.2
65°	5119.4	4024.0	3223.3	2639.5	2235.4	2008.0	1845.3	1737.1
67.5°	3954.9	2688.8	1871.1	1297.0	983.4	832.5	727.3	658.7
70°	1994.0	1031.3	625.0	440.9	376.8	350.3	332.7	322.4
72.5°	585.2	390.9	324.6	287.1	264.2	248.0	237.7	232.7
75°	323.8	264.2	233.3	212.0	197.3	186.2	179.7	175.2
77.5°	223.0	192.1	176.6	162.7	150.8	142.8	137.6	133.2
80°	156.0	140.6	133.9	126.7	117.8	111.1	103.8	100.8
82.5°	103.8	97.1	95.7	89.8	84.6	77.3	64.0	59.6
85°	61.1	60.4	60.4	58.1	54.4	47.8	38.3	38.3
87.5°	21.3	22.1	22.7	24.3	23.5	19.9	16.2	15.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)