

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: P198655

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198655
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
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 12681.5 lumens
Efficiency: N/A
Efficacy: 114.2 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): 111
Input Voltage (V): NR
Input Current (A_{in}): 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

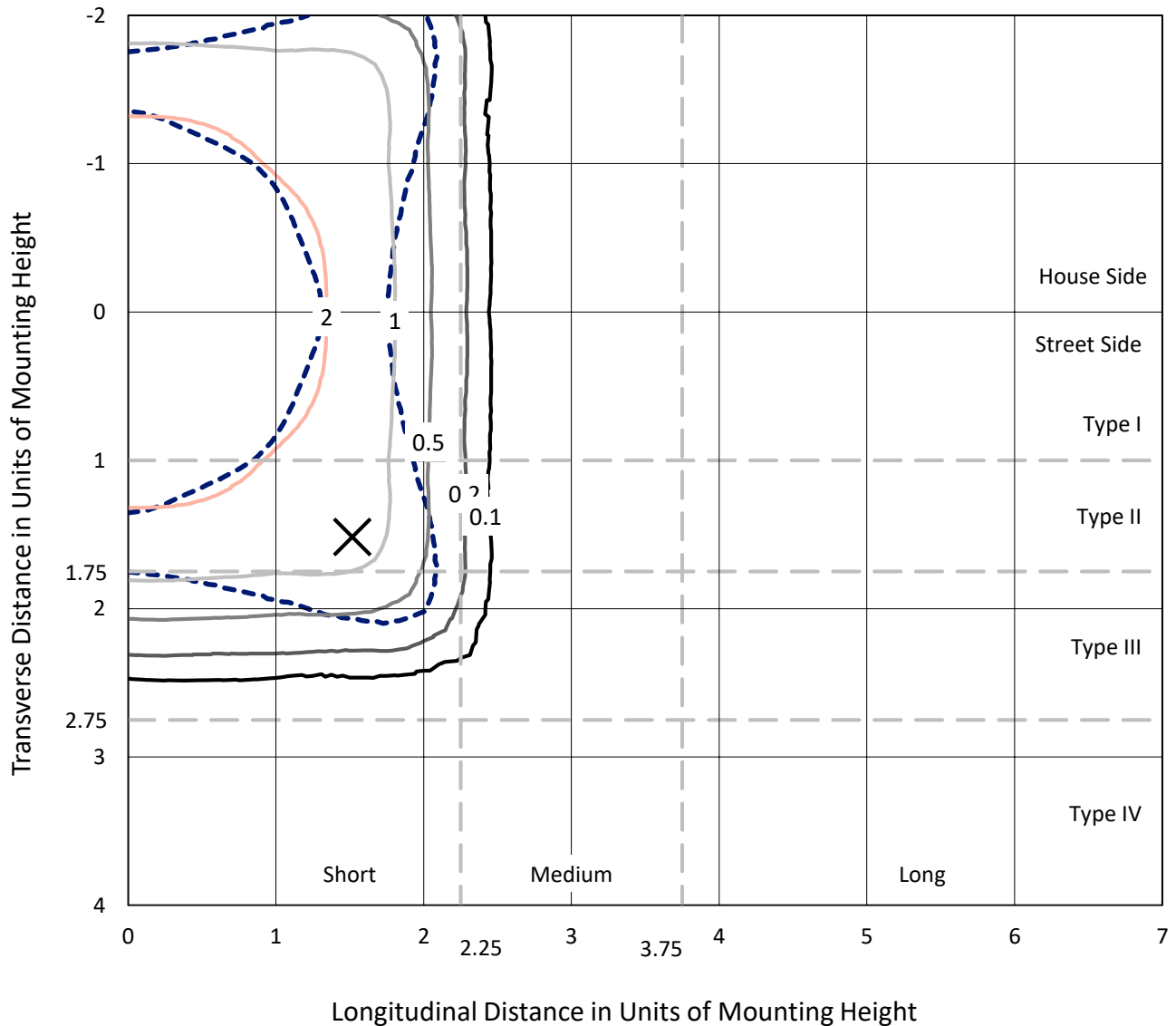


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Iso-Footcandle Lines of Horizontal Illumination

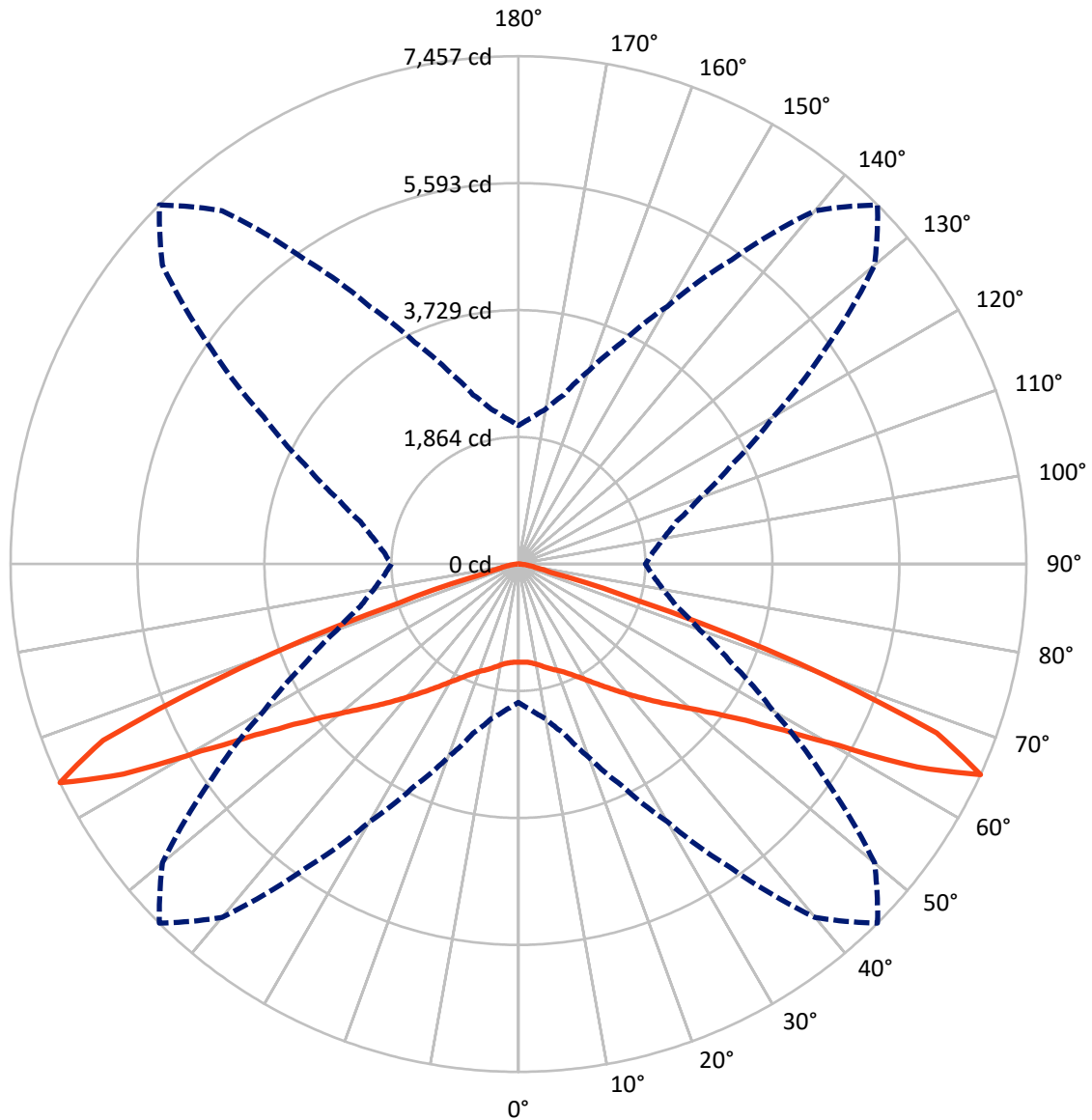
× Max cd
 - - - 1/2 Max cd



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 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6340.8	0.0	6340.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6340.8	0.0	6340.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	12681.5	0.0	12681.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.5	1.1
10°-20°	450.2	3.6
20°-30°	839.9	6.6
30°-40°	1416.2	11.2
40°-50°	2300.3	18.1
50°-60°	3604.1	28.4
60°-70°	3402.1	26.8
70°-80°	458.5	3.6
80°-90°	69.8	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°	12681.5	100.0
0°-180°	12681.5	100.0



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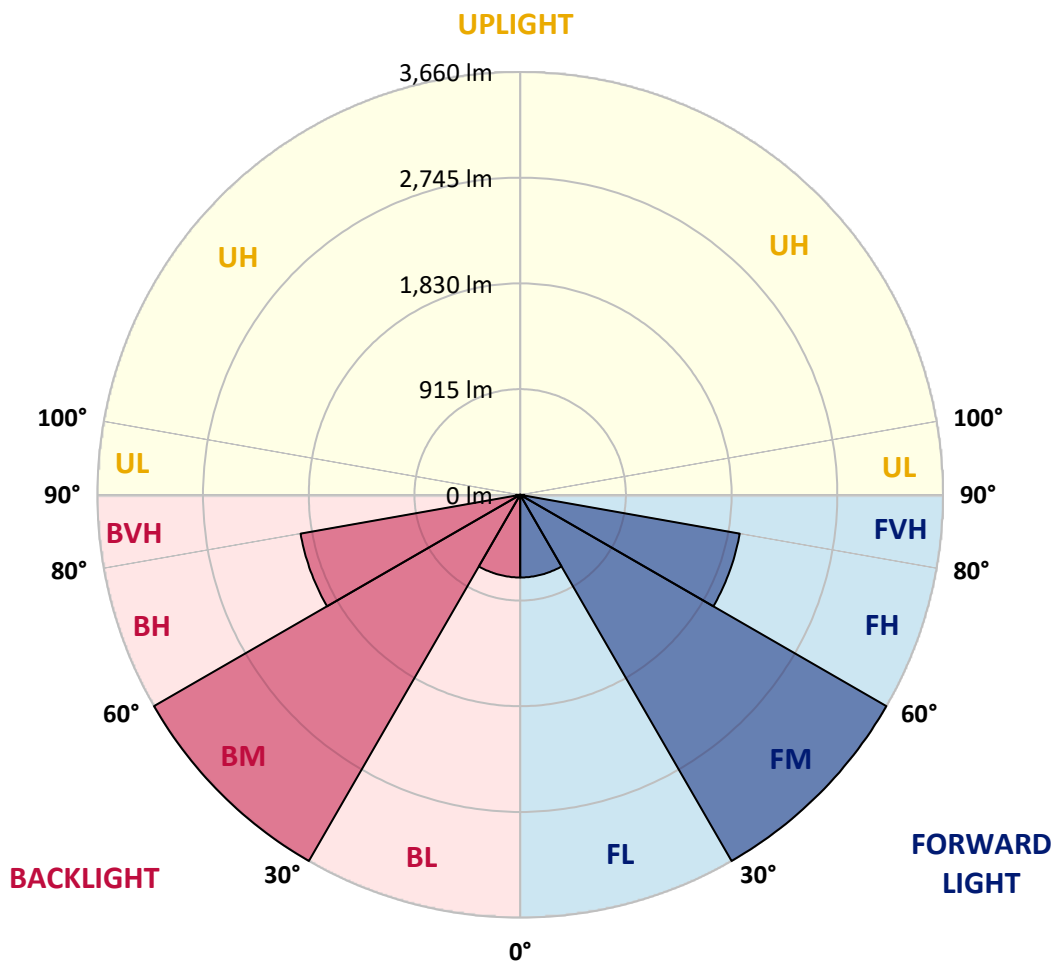
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	715.3	5.6			
FM (30°-60°)	3660.3	28.9			
FH (60°-80°)	1930.3	15.2			G2/5000
FVH (80°-90°)	34.9	0.3			G1/100
BL (0°-30°)	715.3	5.6	B2/1000		
BM (30°-60°)	3660.3	28.9	B3/5000		
BH (60°-80°)	1930.3	15.2	B3/2500		G2/5000
BVH (80°-90°)	34.9	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	1442.5	1442.5	1442.5	1442.5	1442.5	1442.5	1442.5	1442.5	1442.5	1442.5	1442.5
2.5°	1454.3	1454.3	1456.7	1456.0	1452.8	1450.4	1448.0	1444.9	1443.3	1441.7	1440.9
5°	1462.3	1462.3	1464.7	1463.8	1461.5	1458.3	1456.7	1454.3	1452.0	1450.4	1451.2
7.5°	1482.1	1482.8	1483.6	1482.8	1480.4	1478.1	1474.9	1474.1	1470.9	1468.5	1470.2
10°	1512.0	1512.0	1512.8	1513.6	1512.0	1506.5	1506.5	1505.0	1501.8	1498.6	1499.3
12.5°	1545.2	1545.2	1546.0	1546.0	1546.0	1542.8	1543.6	1542.8	1538.9	1537.3	1538.9
15°	1577.6	1578.4	1578.4	1579.9	1579.9	1580.8	1583.9	1583.9	1582.3	1581.6	1581.6
17.5°	1615.5	1617.1	1617.9	1620.3	1621.1	1622.6	1625.8	1626.6	1627.4	1625.0	1625.8
20°	1666.1	1666.9	1669.3	1670.1	1673.1	1673.1	1674.8	1674.0	1672.4	1669.3	1669.3
22.5°	1723.0	1724.5	1729.3	1729.3	1733.2	1730.8	1731.7	1729.3	1725.3	1723.8	1722.1
25°	1797.2	1799.6	1803.6	1801.9	1803.6	1799.6	1799.6	1799.6	1797.2	1794.9	1794.1
27.5°	1891.2	1887.2	1891.2	1888.1	1887.2	1884.1	1884.9	1883.4	1880.9	1880.2	1877.0
30°	1989.1	1984.4	1986.8	1987.6	1986.1	1985.2	1982.1	1979.7	1975.7	1976.5	1974.2
32.5°	2101.3	2096.6	2099.0	2099.8	2098.2	2099.8	2099.0	2093.5	2088.8	2091.8	2091.8
35°	2234.8	2231.7	2238.0	2240.4	2235.7	2233.3	2230.1	2223.8	2216.7	2221.4	2222.3
37.5°	2395.2	2391.2	2396.1	2402.3	2393.6	2388.9	2376.3	2366.8	2362.1	2364.4	2367.6
40°	2561.9	2562.7	2576.1	2577.7	2568.2	2562.7	2550.1	2535.8	2522.4	2522.4	2526.4
42.5°	2737.3	2739.7	2755.4	2760.9	2757.9	2747.5	2730.2	2712.8	2695.4	2698.5	2703.4
45°	2935.6	2932.4	2949.0	2962.5	2960.1	2956.9	2940.3	2908.8	2892.9	2892.1	2900.1
47.5°	3144.1	3150.5	3167.9	3190.8	3190.0	3182.1	3160.7	3131.5	3102.3	3104.7	3114.1
50°	3387.4	3396.1	3425.4	3448.3	3451.4	3449.1	3423.8	3389.9	3348.7	3351.1	3363.8
52.5°	3605.5	3618.1	3652.1	3699.5	3728.8	3742.2	3725.6	3694.0	3652.1	3654.5	3667.9
55°	3803.0	3822.8	3873.3	3938.1	3996.6	4051.0	4075.5	4074.7	4043.9	4051.0	4068.4
57.5°	3927.0	3954.6	4031.2	4135.6	4251.7	4361.5	4456.3	4545.6	4565.3	4602.5	4602.5
60°	3760.4	3825.1	3927.0	4105.5	4333.8	4580.4	4847.4	5107.3	5274.7	5406.6	5335.5
62.5°	3140.2	3235.8	3378.7	3614.2	3969.7	4409.6	4946.1	5550.4	6180.9	6566.3	6283.5
65°	2031.8	2151.9	2307.6	2572.2	3020.1	3586.6	4367.8	5454.1	6773.3	7457.4	6825.4
67.5°	805.0	886.4	981.1	1169.1	1557.9	2114.0	2990.9	4330.7	5981.0	6626.4	5917.8
70°	384.7	398.1	416.3	456.6	553.8	747.4	1201.6	2133.8	3667.9	4348.1	3580.2
72.5°	278.0	280.5	289.1	302.6	331.0	370.5	450.3	652.5	1264.8	1839.1	1266.3
75°	210.9	214.1	218.8	226.0	240.9	259.9	289.9	347.6	432.9	499.3	432.1
77.5°	160.4	163.6	167.5	174.6	182.5	195.9	206.9	229.9	266.3	280.5	278.9
80°	116.9	122.4	128.8	135.1	140.7	146.9	147.7	158.8	179.3	192.7	188.8
82.5°	74.3	79.0	95.5	102.7	103.5	105.1	104.2	105.1	116.1	125.6	122.4
85°	47.4	50.5	59.2	67.1	65.6	68.7	68.7	67.1	62.4	53.7	64.0
87.5°	23.7	24.4	28.4	35.6	34.0	30.0	29.3	29.3	21.4	18.2	19.7
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°	1442.5	1442.5	1442.5	1442.5	1442.5	1442.5	1442.5	1442.5
2.5°	1438.6	1440.1	1437.8	1437.8	1436.9	1438.6	1436.2	1436.2
5°	1449.6	1452.0	1451.2	1451.2	1452.8	1454.3	1453.6	1452.8
7.5°	1469.4	1470.9	1472.5	1473.4	1474.9	1474.1	1475.7	1474.9
10°	1499.3	1497.8	1500.2	1497.8	1498.6	1497.0	1497.8	1497.8
12.5°	1537.3	1534.9	1533.4	1531.8	1531.8	1528.6	1528.6	1529.4
15°	1580.8	1576.8	1573.6	1572.1	1570.4	1570.4	1568.1	1569.7
17.5°	1623.4	1619.4	1613.9	1613.9	1611.6	1610.0	1608.4	1612.4
20°	1668.4	1664.4	1661.4	1660.6	1655.9	1654.2	1655.0	1659.7
22.5°	1720.6	1718.3	1718.3	1716.6	1713.4	1711.1	1711.1	1716.6
25°	1790.9	1786.2	1786.9	1787.7	1786.2	1786.2	1784.5	1788.5
27.5°	1877.0	1873.0	1875.4	1877.0	1875.4	1877.8	1875.4	1878.5
30°	1978.1	1975.7	1978.1	1980.5	1976.5	1976.5	1974.9	1977.4
32.5°	2099.0	2095.8	2097.4	2097.4	2091.8	2087.1	2080.8	2085.6
35°	2231.7	2227.8	2231.0	2233.3	2227.0	2222.3	2212.7	2216.7
37.5°	2377.8	2379.4	2383.4	2393.6	2392.1	2384.2	2377.0	2380.2
40°	2541.4	2549.3	2566.7	2573.7	2572.2	2564.3	2554.8	2556.4
42.5°	2726.3	2736.5	2754.7	2766.5	2760.9	2749.9	2738.0	2742.8
45°	2927.7	2943.4	2967.2	2979.0	2971.9	2960.1	2943.4	2952.1
47.5°	3141.0	3172.6	3204.2	3219.9	3217.6	3201.0	3179.6	3182.1
50°	3396.1	3438.0	3478.3	3494.1	3482.2	3457.0	3427.0	3426.2
52.5°	3713.7	3758.7	3791.9	3788.0	3758.7	3719.2	3685.3	3683.6
55°	4110.3	4125.3	4120.5	4086.6	4035.2	3973.7	3930.2	3923.0
57.5°	4589.8	4539.2	4465.0	4362.3	4247.0	4130.1	4051.0	4021.8
60°	5175.9	4947.7	4682.3	4402.6	4147.5	3956.3	3835.3	3761.9
62.5°	5660.2	4999.1	4405.7	3919.8	3522.5	3286.3	3121.2	3019.3
65°	5494.4	4318.8	3459.3	2832.9	2399.1	2155.1	1980.5	1864.3
67.5°	4244.5	2885.8	2008.2	1391.9	1055.4	893.4	780.5	707.1
70°	2140.0	1106.7	670.6	473.2	404.5	376.0	357.1	346.0
72.5°	628.0	419.5	348.4	308.1	283.6	266.3	255.1	249.6
75°	347.6	283.6	250.4	227.5	211.8	199.9	192.7	188.0
77.5°	239.4	206.2	189.6	174.6	161.9	153.2	147.7	143.0
80°	167.5	150.9	143.8	135.8	126.4	119.3	111.4	108.2
82.5°	111.4	104.2	102.7	96.4	90.8	83.0	68.7	64.0
85°	65.6	64.8	64.8	62.4	58.4	51.4	41.1	41.1
87.5°	22.9	23.7	24.4	26.1	25.3	21.4	17.4	16.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)