

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: P198757

Luminaire Tested: **XNV2-AF-02-LED-U-T2-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198757
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24136)
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-T2-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9755.9 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B2 - U0 - G2

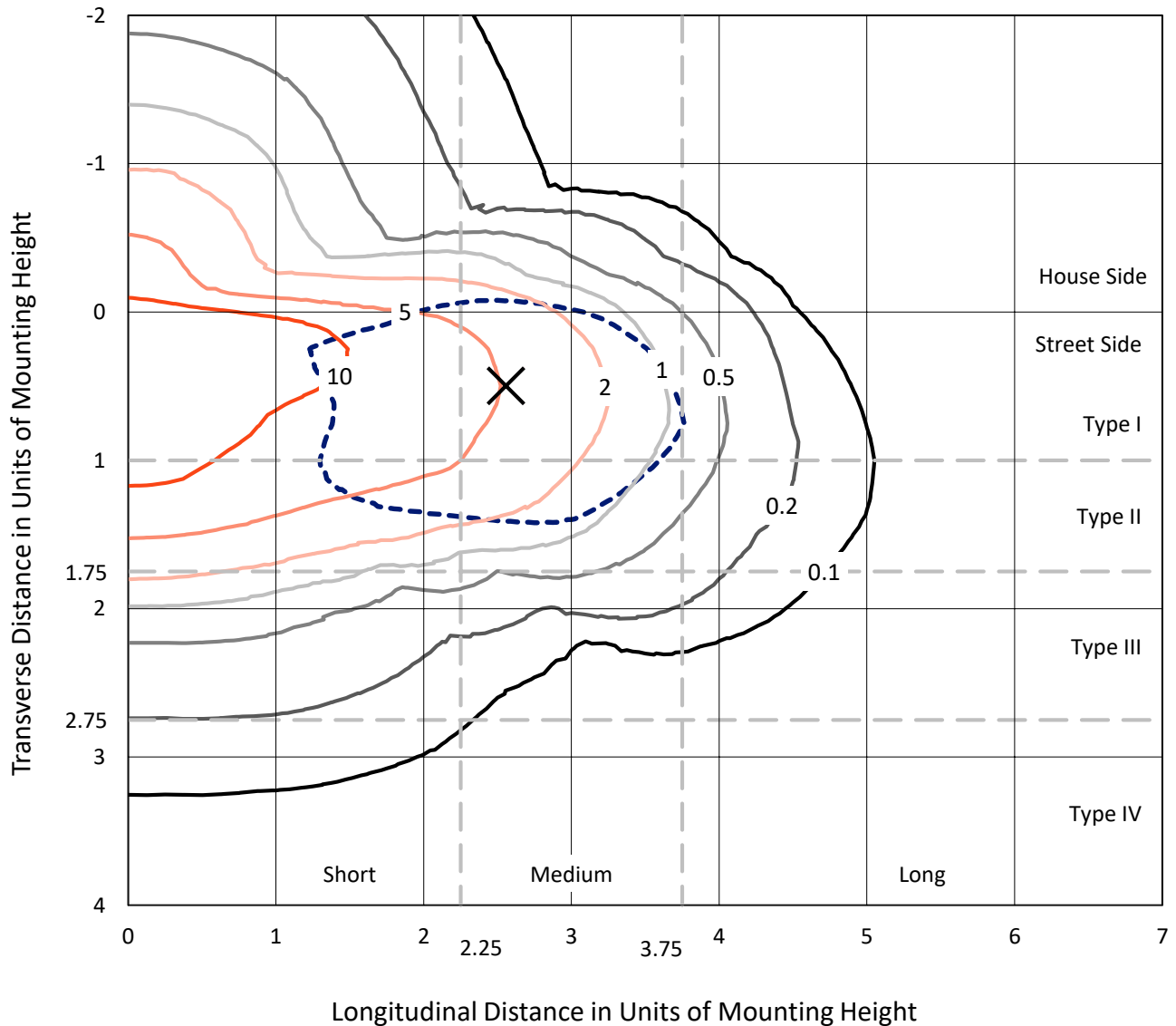
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

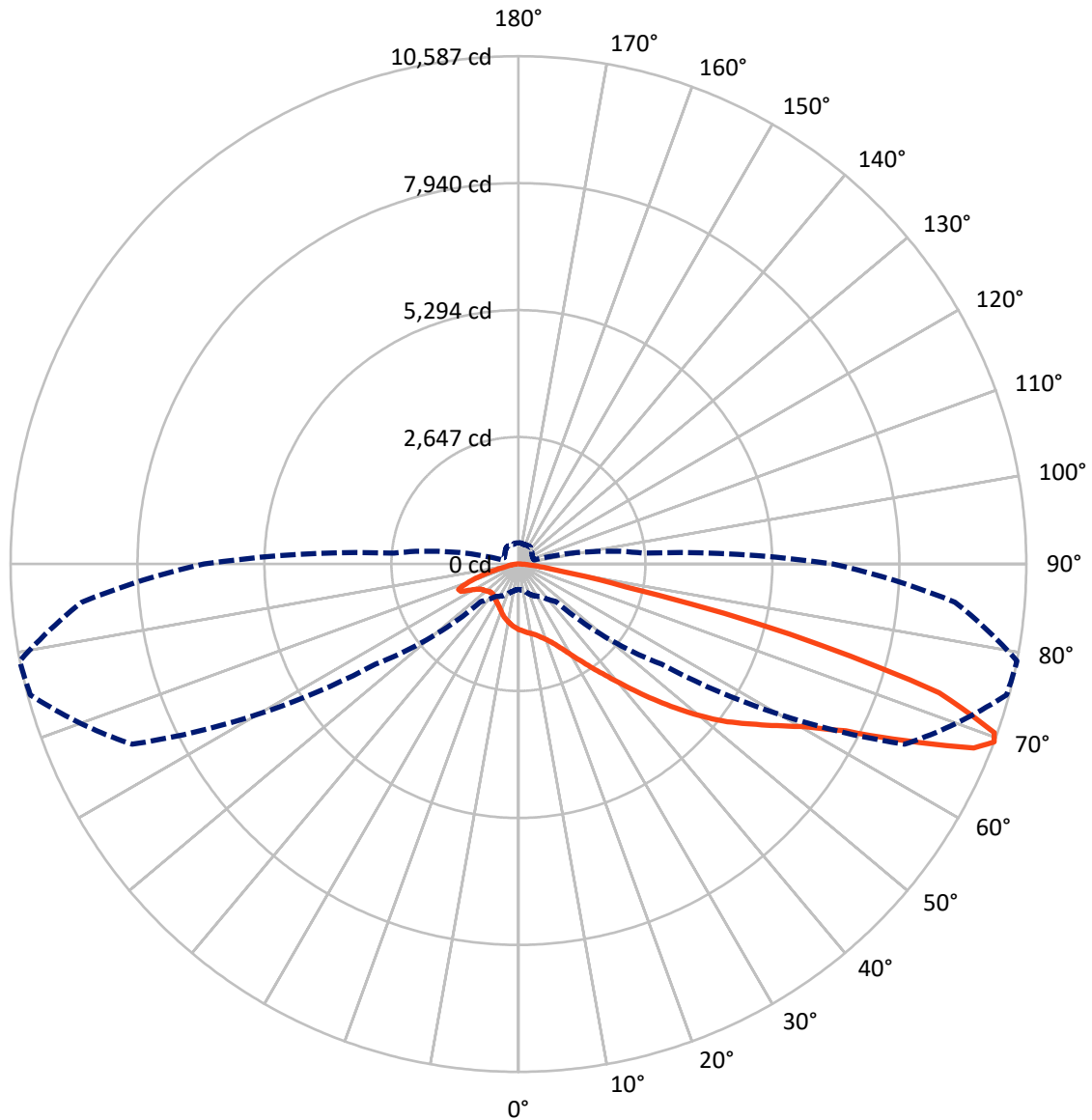
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.5 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1835.2	0.0	1835.2
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	7920.6	0.0	7920.6
	% Fixture	81.2	0.0	81.2
Total	Lumens	9755.9	0.0	9755.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.9	1.3
10°-20°	363.9	3.7
20°-30°	601.3	6.2
30°-40°	973.6	10.0
40°-50°	1555.3	15.9
50°-60°	2227.4	22.8
60°-70°	2481.7	25.4
70°-80°	1241.5	12.7
80°-90°	184.2	1.9
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°	9755.9	100.0
0°-180°	9755.9	100.0

Coefficient of Utilization



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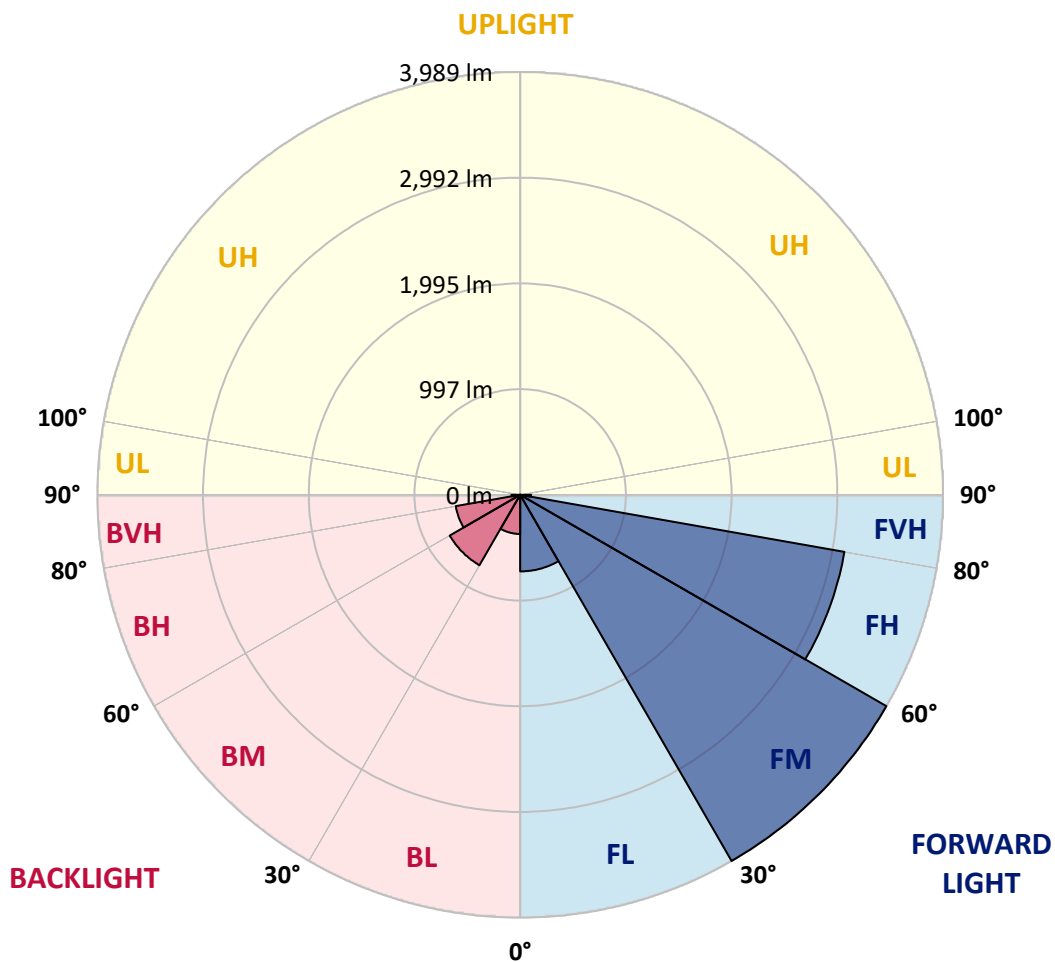
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	722.3	7.4			
FM	(30°-60°)	3989.2	40.9			
FH	(60°-80°)	3106.1	31.8			G2/5000
FVH	(80°-90°)	103.0	1.1			G2/225
BL	(0°-30°)	369.7	3.8	B1/500		
BM	(30°-60°)	767.2	7.9	B1/1000		
BH	(60°-80°)	617.1	6.3	B2/1000		G2/1000
BVH	(80°-90°)	81.3	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0
2.5°	1503.1	1499.9	1499.2	1489.7	1484.6	1473.8	1448.2	1422.0	1397.8	1385.0	1371.6
5°	1628.8	1622.4	1619.2	1603.3	1589.3	1565.0	1524.8	1483.3	1439.9	1417.6	1390.8
7.5°	1704.7	1705.5	1705.5	1692.7	1678.7	1649.3	1598.2	1541.4	1476.9	1447.6	1405.4
10°	1711.2	1711.8	1721.4	1724.6	1727.8	1712.4	1665.2	1593.8	1510.8	1472.4	1417.6
12.5°	1648.0	1652.5	1668.4	1691.3	1724.0	1740.6	1720.1	1649.9	1554.2	1507.5	1440.5
15°	1563.1	1567.6	1588.0	1623.1	1675.4	1730.9	1759.7	1714.4	1610.9	1556.1	1474.4
17.5°	1521.6	1526.8	1540.8	1568.8	1619.8	1694.5	1780.8	1783.3	1677.9	1614.8	1514.6
20°	1501.8	1505.7	1523.5	1546.5	1585.5	1656.9	1782.7	1856.0	1757.7	1684.4	1563.7
22.5°	1547.1	1548.4	1557.3	1570.1	1596.3	1651.1	1781.4	1931.3	1857.4	1771.8	1626.9
25°	1679.9	1671.6	1665.2	1649.3	1655.6	1694.5	1801.8	2011.7	1984.9	1886.7	1711.2
27.5°	1836.9	1835.6	1819.0	1782.0	1758.4	1783.3	1859.8	2101.8	2141.3	2032.8	1821.6
30°	2011.7	2012.5	1995.2	1949.8	1902.0	1904.5	1952.4	2205.8	2328.3	2209.0	1957.5
32.5°	2194.9	2206.4	2174.5	2129.3	2071.2	2052.7	2085.2	2331.5	2544.7	2417.0	2115.2
35°	2413.9	2415.8	2380.7	2314.3	2256.2	2226.9	2256.8	2488.5	2794.3	2661.5	2307.3
37.5°	2641.1	2642.4	2606.0	2521.1	2447.7	2428.6	2461.7	2679.4	3058.5	2939.8	2533.2
40°	2826.8	2840.2	2811.5	2731.7	2657.7	2646.2	2694.0	2907.9	3396.2	3269.1	2802.0
42.5°	3037.4	3052.8	3018.3	2935.4	2876.6	2872.8	2947.4	3168.3	3731.9	3650.2	3106.4
45°	3274.9	3296.6	3248.7	3155.5	3105.8	3190.0	3194.5	3456.8	4118.7	4076.6	3449.1
47.5°	3534.0	3551.9	3512.9	3412.8	3358.6	3480.4	3436.4	3768.9	4536.7	4533.5	3820.0
50°	3733.8	3753.6	3757.4	3713.4	3656.5	3671.9	3701.9	4096.9	4953.5	5003.3	4203.5
52.5°	3697.5	3716.6	3802.7	3918.2	4009.6	3970.0	4006.3	4445.4	5356.3	5461.5	4568.0
55°	3403.9	3414.0	3575.5	3850.0	4238.7	4427.5	4430.1	4824.5	5739.2	5886.7	4913.9
57.5°	2874.7	2876.0	3085.9	3490.6	4105.3	4724.4	5099.0	5300.7	6138.7	6356.4	5342.9
60°	2034.1	2039.3	2283.6	2812.8	3627.2	4688.6	5818.3	6152.7	6601.5	6884.3	5895.6
62.5°	1207.6	1219.1	1403.5	1828.0	2694.0	4229.1	6243.4	7668.7	7283.1	7658.4	6780.2
65°	785.7	795.2	905.7	1118.9	1591.8	3077.0	6103.6	9136.6	8573.0	8876.2	8051.6
67.5°	605.1	612.7	699.5	828.5	976.5	1663.3	4880.1	9444.3	10143.2	10237.6	9124.5
69°	531.6	538.1	601.9	725.7	822.0	1101.0	3636.8	8885.8	10535.7	10587.3	9137.9
70°	492.8	497.9	557.8	665.0	755.0	878.9	2783.4	8237.3	10392.1	10524.2	8874.3
72.5°	405.9	410.4	453.2	535.5	617.1	626.1	1233.1	6015.0	8750.5	9173.0	7509.7
75°	338.9	341.5	369.6	429.5	499.7	498.5	629.9	3407.0	5339.6	5843.2	4636.9
77.5°	282.7	284.7	303.2	340.2	394.4	392.5	443.6	1470.5	2357.7	2274.7	1596.3
80°	249.6	250.8	260.4	270.0	304.4	302.5	328.7	675.2	959.3	886.5	603.7
82.5°	189.6	192.1	240.6	245.1	236.2	227.8	229.1	393.1	491.4	447.4	324.3
85°	107.2	107.8	154.5	180.7	205.5	154.5	148.7	203.0	242.5	212.6	141.7
87.5°	47.9	49.8	74.1	85.5	111.1	90.6	84.9	86.1	104.6	86.8	56.2
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0	1369.0
2.5°	1358.9	1348.0	1322.5	1296.3	1270.1	1253.5	1236.3	1220.4	1213.9	1213.3	1201.1
5°	1364.6	1339.0	1280.9	1217.1	1156.5	1109.3	1069.7	1044.2	1019.3	1014.9	1004.0
7.5°	1366.5	1325.0	1230.5	1128.4	1035.8	970.8	931.2	914.0	901.8	898.7	894.9
10°	1365.8	1307.1	1174.3	1034.6	929.4	880.1	865.5	869.3	874.4	877.0	877.0
12.5°	1376.1	1298.8	1118.2	946.5	860.4	836.8	848.2	868.1	883.3	889.8	891.0
15°	1394.6	1293.7	1056.3	869.9	811.8	817.6	845.7	874.4	896.1	905.7	908.3
17.5°	1417.6	1286.8	984.8	806.8	783.8	803.5	839.9	876.4	902.4	914.6	916.6
20°	1443.1	1276.5	910.8	759.5	758.9	783.8	820.2	861.0	889.0	902.4	901.8
22.5°	1477.6	1266.9	841.9	725.1	731.4	754.4	784.4	821.4	847.6	859.7	857.1
25°	1523.5	1258.0	779.9	694.4	700.2	715.5	736.5	764.7	783.2	789.5	785.0
27.5°	1585.5	1251.0	731.4	666.4	665.7	672.7	685.5	700.8	709.7	707.8	700.8
30°	1661.4	1244.0	695.7	641.5	632.5	631.9	637.6	646.5	652.3	640.8	635.0
32.5°	1746.3	1231.8	663.8	619.7	603.7	598.0	600.6	612.7	636.4	624.8	620.4
35°	1846.4	1217.8	631.9	596.2	584.0	573.2	575.1	601.2	672.7	664.4	659.9
37.5°	1967.1	1205.0	602.5	570.6	570.0	556.6	555.3	586.6	682.3	664.4	660.6
40°	2112.0	1202.5	576.3	542.5	552.7	547.6	543.2	562.3	629.3	592.9	585.9
42.5°	2286.9	1213.9	557.2	515.7	533.0	545.0	536.7	541.2	568.7	536.1	530.4
45°	2491.1	1245.2	543.2	492.1	511.9	543.2	533.6	529.8	534.2	516.4	512.5
47.5°	2729.1	1300.8	533.6	472.3	492.1	538.1	532.3	524.7	522.7	512.5	509.9
50°	2983.8	1375.5	527.2	454.4	474.2	529.1	531.6	520.8	517.6	513.1	511.9
52.5°	3236.6	1456.5	519.6	439.2	459.5	518.2	532.3	517.0	512.5	509.9	508.7
55°	3488.1	1540.8	505.5	425.8	448.7	505.5	531.6	511.9	506.8	506.8	506.8
57.5°	3814.2	1669.0	487.0	414.9	434.7	488.9	523.3	506.2	499.1	499.7	500.4
60°	4285.2	1884.2	466.6	402.7	416.1	469.7	510.6	495.9	487.6	490.2	490.8
62.5°	5072.2	2260.1	438.4	385.6	397.0	449.4	494.0	481.9	474.2	478.7	479.4
65°	6121.5	2715.1	401.5	363.8	377.2	426.4	472.9	465.2	457.0	467.8	467.2
67.5°	6761.7	2848.5	362.5	340.8	358.0	402.1	446.8	443.6	437.8	457.0	455.7
69°	6551.7	2607.3	340.2	326.1	344.6	385.6	430.2	428.9	424.4	442.9	441.7
70°	6225.6	2381.9	326.1	316.6	337.7	375.3	419.3	419.3	414.9	430.9	427.6
72.5°	5000.7	1766.7	293.6	292.4	313.4	347.2	389.9	393.1	390.6	396.4	393.1
75°	2936.0	1064.6	261.7	265.6	284.1	317.2	357.4	360.0	357.4	356.8	357.4
77.5°	1018.0	477.4	231.1	236.8	252.8	286.5	321.7	326.8	322.9	318.4	319.8
80°	398.2	277.6	197.8	206.1	219.5	252.2	285.9	289.1	283.4	282.7	277.6
82.5°	239.4	169.1	153.9	167.3	183.8	218.9	247.0	245.7	241.2	267.4	234.3
85°	104.0	93.8	112.3	125.7	134.0	164.1	208.7	203.0	192.1	169.1	165.3
87.5°	42.1	48.5	61.9	74.7	80.4	106.0	143.0	137.9	139.7	114.9	114.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)