

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: LUMARK

Report Number: P882627

Luminaire Tested: **NAV-SB2C-830-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882627
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13233 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

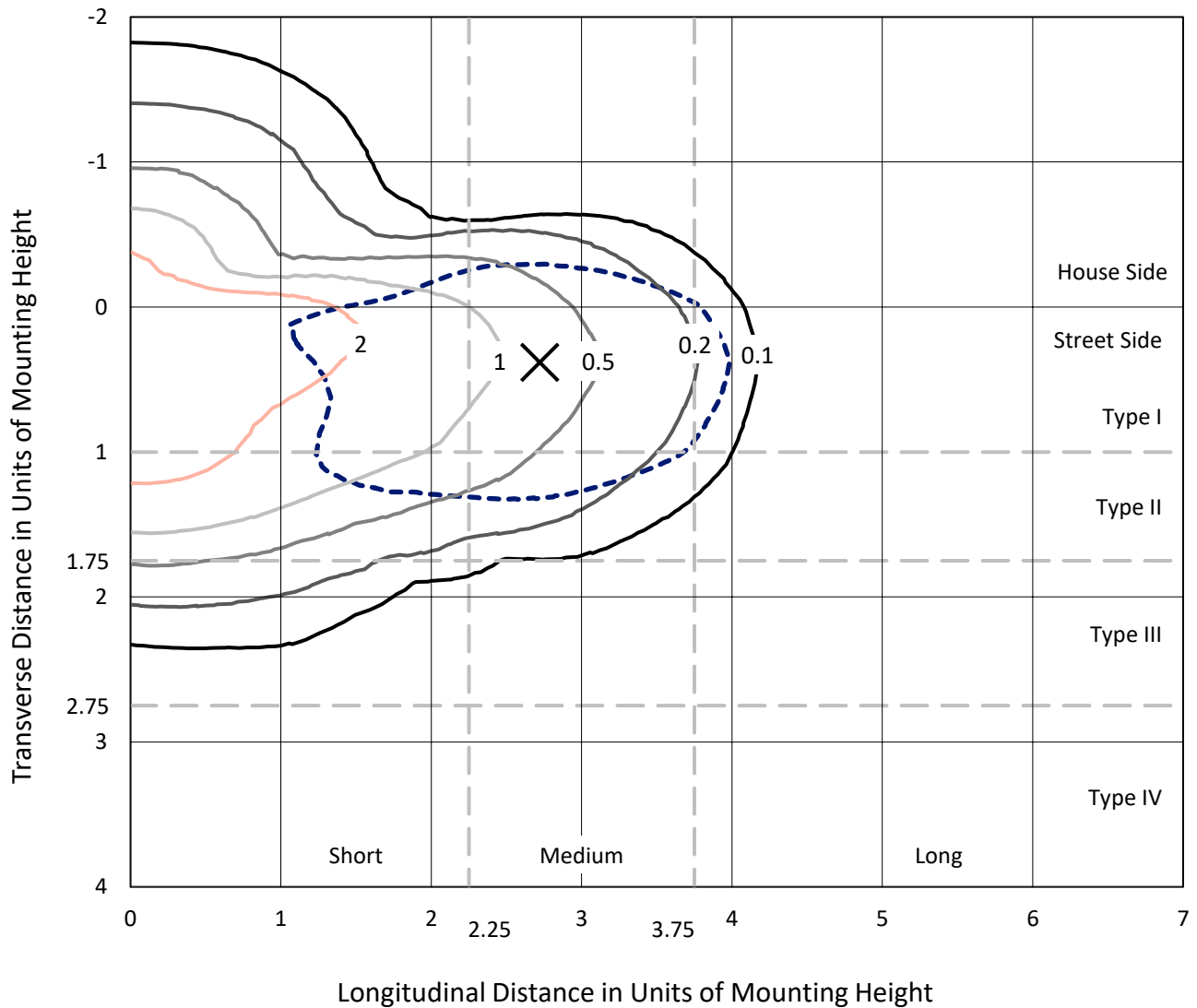
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

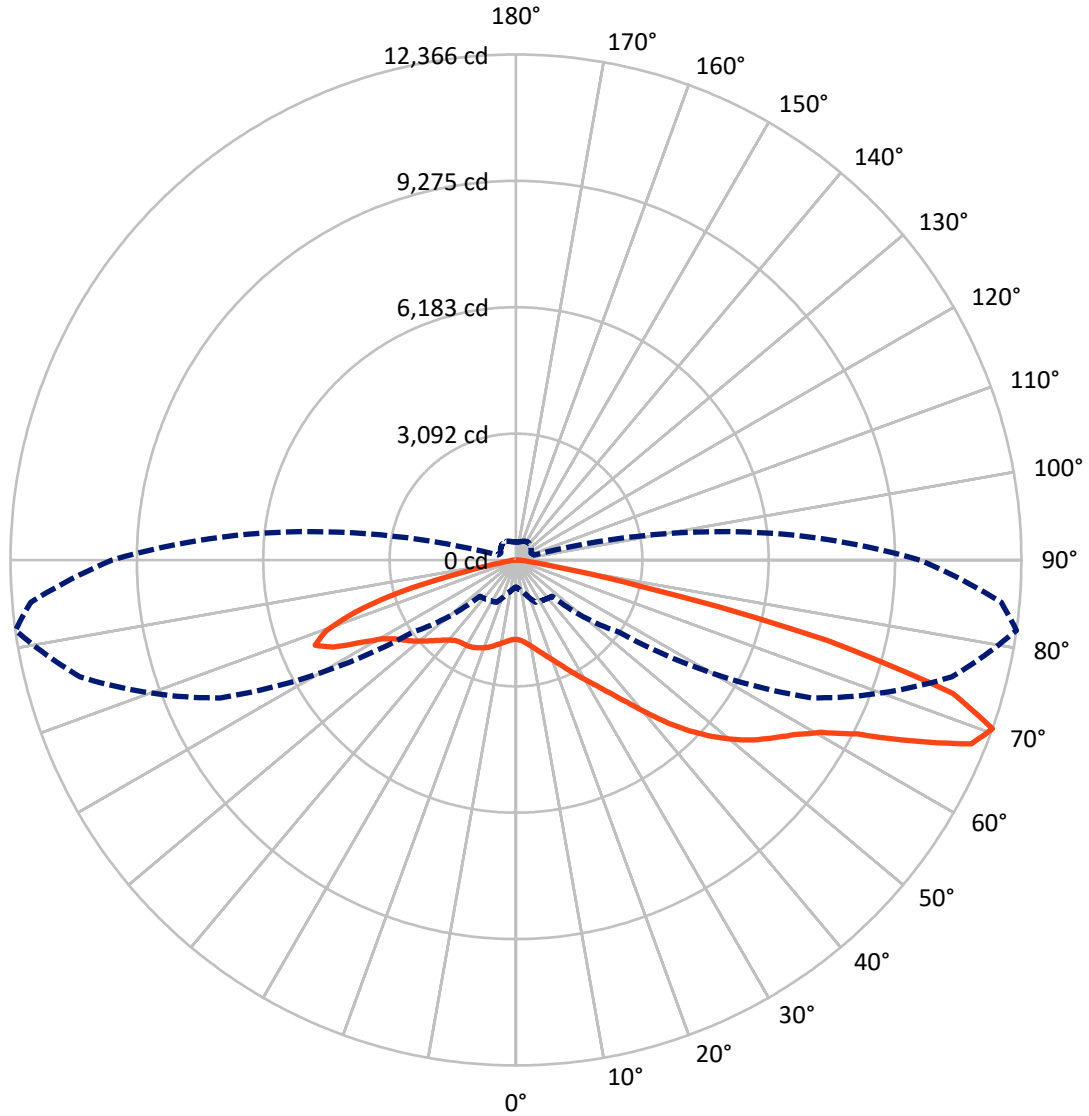
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3262.3	0.0	3262.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	9970.7	0.0	9970.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	13233.0	0.0	13233.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.2	1.4
10°-20°	526.3	4.0
20°-30°	880.4	6.7
30°-40°	1375.5	10.4
40°-50°	2190.6	16.6
50°-60°	3048.5	23.0
60°-70°	3188.8	24.1
70°-80°	1666.7	12.6
80°-90°	173.1	1.3
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°	13233.0	100.0
0°-180°	13233.0	100.0

Coefficient of Utilization



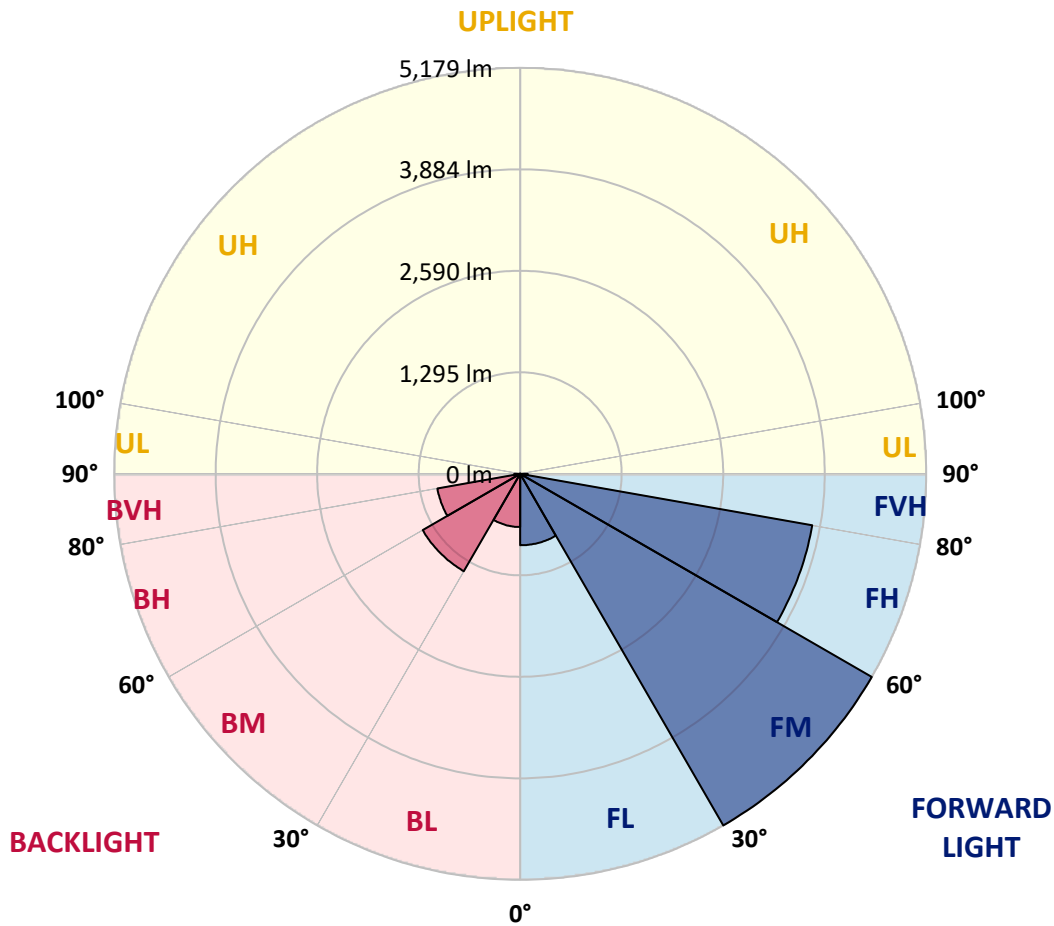
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	911.2	6.9			
FM (30°-60°)	5179.3	39.1			
FH (60°-80°)	3783.4	28.6			G2/5000
FVH (80°-90°)	96.9	0.7			G1/100
BL (0°-30°)	678.7	5.1	B2/1000		
BM (30°-60°)	1435.3	10.8	B2/2500		
BH (60°-80°)	1072.1	8.1	B3/2500		G3/2500
BVH (80°-90°)	76.2	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1
2.5°	1986.5	1997.7	1994.2	1990.7	1990.7	1985.8	1985.1	1978.0	1972.4	1963.3	1961.2
5°	2011.7	2023.7	2022.3	2025.1	2034.2	2036.3	2038.4	2034.2	2023.0	2011.7	2006.8
7.5°	1989.3	2002.6	2006.8	2023.7	2051.8	2077.0	2096.0	2103.7	2093.2	2077.0	2069.3
10°	1913.4	1928.2	1942.9	1983.0	2032.8	2092.5	2143.1	2173.2	2171.1	2155.7	2142.4
12.5°	1759.7	1775.1	1806.7	1884.7	1975.9	2081.3	2175.4	2238.5	2260.3	2249.1	2225.9
15°	1636.8	1650.1	1674.0	1754.0	1872.7	2032.8	2187.3	2310.2	2365.6	2359.3	2331.2
17.5°	1633.3	1638.9	1653.6	1691.6	1782.8	1957.0	2174.7	2380.4	2486.4	2485.7	2450.6
20°	1695.1	1697.2	1705.6	1713.3	1765.3	1899.4	2142.4	2438.7	2621.9	2621.9	2584.0
22.5°	1780.7	1779.3	1787.8	1780.7	1806.0	1894.5	2122.0	2489.9	2772.9	2784.1	2736.4
25°	1909.2	1902.2	1900.1	1883.9	1888.9	1940.1	2144.5	2548.2	2952.0	2975.1	2915.5
27.5°	2080.6	2069.3	2061.6	2024.4	2011.7	2034.2	2213.3	2618.4	3151.4	3191.4	3115.6
30°	2303.9	2283.5	2272.3	2207.7	2162.0	2165.5	2317.2	2711.8	3359.9	3424.5	3328.3
32.5°	2608.6	2577.0	2546.8	2440.8	2357.2	2329.8	2451.3	2841.0	3586.0	3689.3	3565.7
35°	2949.9	2924.6	2892.3	2728.7	2600.2	2537.0	2632.5	3021.5	3850.8	4014.4	3853.6
37.5°	3278.5	3256.7	3272.2	3051.7	2886.0	2794.0	2869.8	3263.7	4177.3	4418.8	4214.5
40°	3618.3	3601.5	3603.6	3392.9	3199.8	3096.6	3157.7	3567.8	4551.5	4899.8	4648.4
42.5°	3987.7	3975.0	3932.9	3746.1	3529.2	3433.0	3489.1	3918.9	4953.2	5447.5	5124.5
45°	4401.3	4393.5	4354.2	4140.1	3891.5	3783.3	3859.2	4306.5	5356.9	5962.9	5602.7
47.5°	4758.7	4765.0	4760.1	4579.6	4321.9	4163.2	4253.8	4710.9	5732.6	6447.4	6061.2
50°	4930.7	4963.7	5012.2	4956.0	4795.9	4634.4	4651.9	5101.3	6090.7	6901.7	6500.8
52.5°	4840.8	4903.3	5035.3	5125.2	5187.0	5153.3	5106.3	5488.9	6427.8	7311.8	6916.5
55°	4505.9	4593.7	4812.7	5029.7	5345.0	5590.1	5651.8	5918.7	6756.4	7672.7	7309.7
57.5°	3895.7	4038.2	4234.8	4673.7	5204.6	5801.4	6288.0	6514.8	7104.7	8058.2	7721.2
60°	2849.4	3040.4	3284.8	3937.8	4713.0	5688.4	6829.4	7430.5	7599.7	8557.5	8256.9
62.5°	1823.6	1941.5	2166.2	2781.3	3672.4	5109.1	6995.1	8575.0	8438.8	9376.2	9060.2
65°	1248.5	1324.3	1530.1	1875.5	2374.1	3803.0	6551.3	9433.1	9771.5	10673.8	10433.7
67.5°	907.2	964.8	1140.3	1443.0	1546.9	2250.5	5083.8	9393.8	11067.1	12010.8	11637.2
70°	661.5	702.2	849.6	1140.3	1190.2	1252.0	3079.8	7985.2	11039.0	12366.1	11918.8
72.5°	490.1	518.2	617.2	884.7	963.4	845.4	1524.4	5803.5	9485.7	11185.0	10826.2
75°	354.6	375.7	448.7	676.9	771.0	643.9	760.5	3391.5	6616.6	7867.9	7931.1
77.5°	271.0	287.2	334.9	495.7	617.2	483.1	471.9	1560.2	3137.3	3152.8	3329.7
80°	217.7	228.2	254.2	349.0	473.3	361.6	307.6	629.9	991.5	839.1	880.5
82.5°	160.1	177.7	214.9	245.1	338.5	249.3	187.5	318.1	377.1	324.4	327.2
85°	91.3	103.2	129.9	175.5	216.3	152.4	107.4	141.1	175.5	143.9	128.5
87.5°	32.3	42.1	45.6	68.8	94.1	63.2	41.4	40.7	57.6	42.8	35.8
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°	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1	1940.1
2.5°	1954.2	1950.7	1936.6	1917.7	1898.0	1879.0	1872.7	1859.4	1850.2	1845.3	1850.9
5°	1993.5	1982.3	1949.3	1907.1	1862.9	1815.1	1781.4	1750.5	1728.1	1707.0	1715.4
7.5°	2049.7	2030.0	1973.1	1899.4	1820.8	1741.4	1682.4	1637.5	1607.3	1587.6	1591.8
10°	2115.0	2084.8	1997.7	1887.5	1766.0	1652.2	1582.7	1544.1	1525.1	1514.6	1517.4
12.5°	2190.1	2147.3	2023.0	1860.1	1682.4	1552.5	1504.8	1493.5	1494.2	1494.9	1496.3
15°	2282.8	2223.1	2043.3	1800.4	1573.6	1476.0	1467.6	1485.8	1504.8	1513.9	1513.2
17.5°	2387.4	2303.2	2046.9	1702.1	1466.9	1426.8	1453.5	1492.8	1521.6	1534.3	1537.1
20°	2499.8	2384.6	2021.6	1563.1	1379.1	1386.8	1434.6	1485.1	1516.7	1532.9	1537.1
22.5°	2628.3	2471.7	1961.2	1417.0	1307.5	1343.3	1399.4	1448.6	1481.6	1497.7	1502.0
25°	2775.0	2569.3	1866.4	1294.1	1245.7	1294.1	1350.3	1391.0	1417.7	1432.4	1436.7
27.5°	2937.9	2671.1	1740.0	1196.5	1191.6	1243.6	1289.9	1321.5	1335.5	1346.8	1351.0
30°	3101.5	2763.8	1586.9	1122.8	1144.6	1193.7	1226.7	1240.8	1245.0	1247.1	1252.0
32.5°	3278.5	2843.8	1426.1	1061.7	1099.6	1145.3	1164.9	1171.2	1151.6	1138.2	1142.4
35°	3492.6	2929.5	1268.8	1013.2	1055.4	1094.7	1101.0	1095.4	1072.2	1044.8	1046.2
37.5°	3757.4	3036.2	1143.1	978.8	1013.9	1039.9	1032.2	1030.8	1032.9	1000.6	1002.7
40°	4081.8	3175.3	1051.2	952.2	980.2	985.9	964.1	976.0	986.6	937.4	938.8
42.5°	4442.0	3343.1	992.9	933.9	952.2	938.8	905.1	918.5	917.0	852.4	851.7
45°	4809.2	3525.6	972.5	920.6	926.2	899.5	862.3	865.8	836.3	778.0	780.1
47.5°	5174.4	3721.6	985.2	909.3	893.9	863.7	834.9	819.4	775.9	732.4	732.4
50°	5532.5	3927.3	1031.5	886.9	849.6	832.1	811.0	783.6	737.3	700.1	697.3
52.5°	5864.6	4134.4	1083.5	849.6	794.2	804.7	791.4	759.8	714.1	676.2	676.9
55°	6179.2	4341.6	1103.8	798.4	742.2	780.8	773.1	714.8	660.0	629.2	626.3
57.5°	6521.8	4590.9	1081.4	733.1	700.1	753.4	723.9	659.3	627.7	604.6	602.5
60°	6996.5	4982.0	1032.9	652.3	660.0	712.7	662.2	635.5	601.1	575.1	573.7
62.5°	7785.1	5711.5	955.0	572.3	613.0	652.3	632.7	606.0	570.9	545.6	545.6
65°	8950.7	6725.5	808.2	509.8	560.3	593.3	601.1	574.4	537.9	511.2	512.6
67.5°	9933.7	7361.7	611.6	457.8	506.3	545.6	567.4	541.4	502.8	476.8	477.5
70°	9879.7	6899.6	466.9	406.6	458.5	498.5	526.6	506.3	464.8	440.3	442.4
72.5°	8775.1	5771.9	377.8	354.6	410.1	449.4	483.1	467.7	425.5	401.6	401.6
75°	6446.7	4097.2	301.9	301.9	349.7	398.1	435.4	425.5	386.9	370.0	365.1
77.5°	2717.4	1718.9	236.6	250.7	290.7	342.0	388.3	391.8	358.1	379.2	344.1
80°	722.5	474.0	180.5	197.3	228.2	282.3	337.7	336.3	299.8	280.2	260.5
82.5°	275.3	186.8	128.5	139.0	165.0	216.3	267.5	276.0	239.4	207.1	207.1
85°	106.0	80.0	79.3	83.6	96.2	143.2	202.2	209.2	180.5	153.1	158.0
87.5°	27.4	23.9	29.5	28.1	44.2	76.5	115.9	120.1	110.2	63.9	91.3
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)