

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: P882561

Luminaire Tested: **NAV-SB2C-727-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882561
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-727-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13672 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

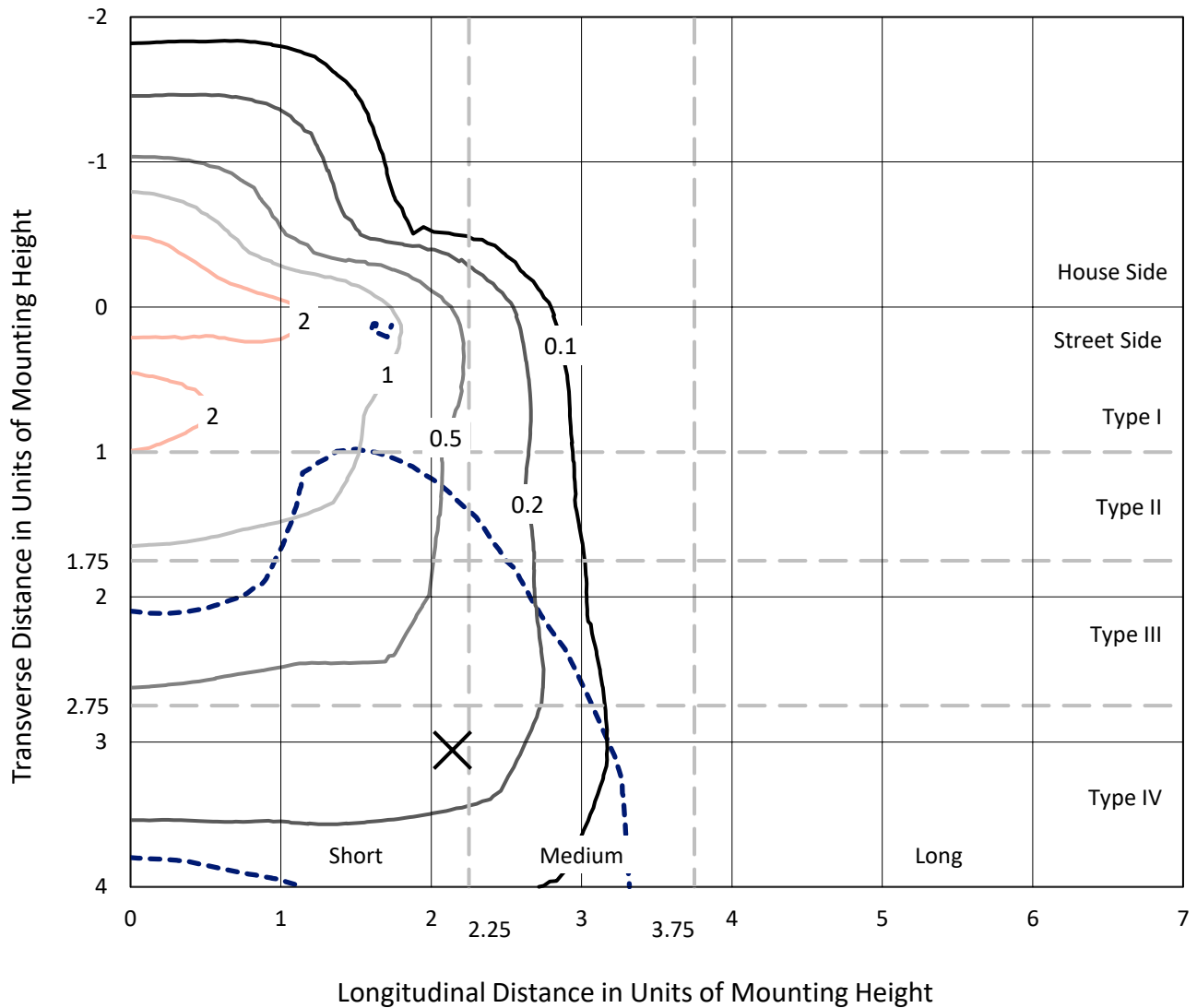
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

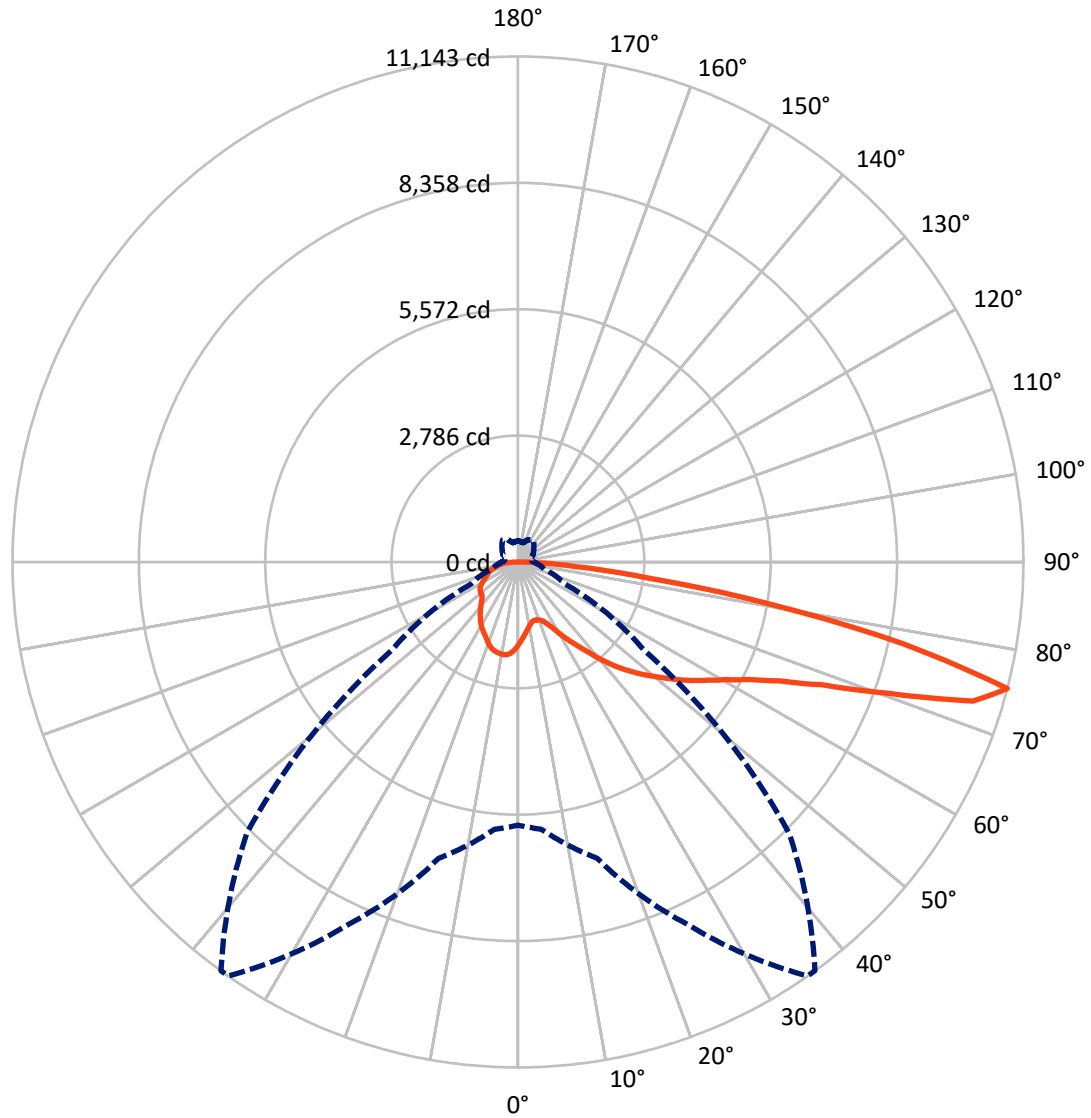
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3253.6	0.0	3253.6
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	10418.4	0.0	10418.4
	% Fixture	76.2	0.0	76.2
Total	Lumens	13672.0	0.0	13672.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	1.3
10°-20°	497.6	3.6
20°-30°	835.5	6.1
30°-40°	1298.5	9.5
40°-50°	1927.3	14.1
50°-60°	2660.8	19.5
60°-70°	3228.2	23.6
70°-80°	2667.8	19.5
80°-90°	383.7	2.8
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°	13672.0	100.0
0°-180°	13672.0	100.0

Coefficient of Utilization



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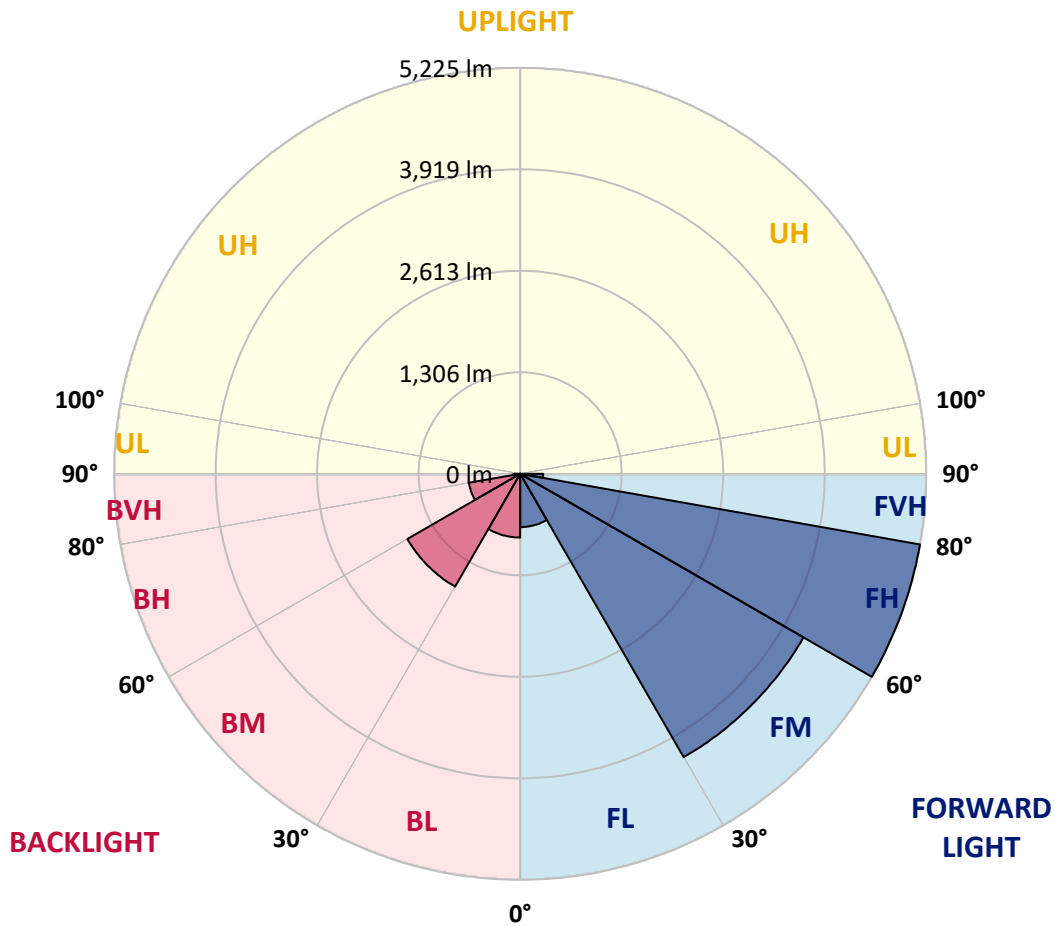
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	685.6	5.0			
FM (30°-60°)	4210.2	30.8			
FH (60°-80°)	5225.2	38.2			G3/7500
FVH (80°-90°)	297.3	2.2			G3/500
BL (0°-30°)	820.0	6.0	B2/1000		
BM (30°-60°)	1676.4	12.3	B2/2500		
BH (60°-80°)	670.8	4.9	B2/1000		G2/1000
BVH (80°-90°)	86.4	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9
2.5°	1680.0	1690.3	1694.8	1692.5	1703.6	1702.2	1717.7	1736.9	1763.5	1789.4	1827.1
5°	1550.6	1561.7	1571.3	1580.2	1601.6	1608.3	1632.7	1669.6	1718.4	1767.9	1830.0
7.5°	1430.2	1439.8	1454.6	1470.8	1507.0	1513.7	1554.3	1612.0	1680.0	1752.4	1838.1
10°	1331.9	1341.5	1357.0	1375.5	1420.6	1428.7	1480.4	1557.3	1646.0	1737.6	1847.0
12.5°	1289.7	1292.7	1301.6	1320.0	1359.2	1364.4	1421.3	1509.2	1612.7	1726.5	1860.3
15°	1287.5	1293.4	1294.2	1303.8	1336.3	1338.5	1391.0	1478.2	1592.0	1724.3	1880.3
17.5°	1309.7	1314.1	1307.5	1313.4	1340.7	1344.4	1385.8	1463.4	1585.4	1733.9	1914.3
20°	1368.8	1372.5	1352.6	1344.4	1364.4	1367.3	1408.0	1473.0	1592.0	1753.9	1960.8
22.5°	1494.5	1496.7	1447.9	1414.6	1416.1	1417.6	1453.1	1512.2	1617.9	1790.1	2020.0
25°	1690.3	1688.8	1611.2	1546.9	1510.0	1501.9	1525.5	1575.8	1661.5	1838.1	2096.1
27.5°	1919.4	1908.4	1830.8	1734.7	1654.1	1642.3	1637.1	1658.5	1723.6	1901.7	2189.2
30°	2178.1	2167.8	2084.3	1958.6	1847.0	1827.8	1779.0	1767.9	1816.0	1988.2	2318.6
32.5°	2461.9	2455.3	2355.5	2203.3	2054.0	2031.8	1949.8	1920.2	1957.9	2119.0	2498.9
35°	2699.9	2694.0	2611.2	2454.6	2272.0	2244.7	2161.1	2127.9	2147.1	2286.8	2734.7
37.5°	2915.0	2912.1	2841.1	2717.7	2529.2	2495.9	2402.1	2391.0	2387.3	2507.8	3020.7
40°	3114.6	3107.2	3033.3	2968.2	2828.5	2798.2	2715.5	2705.9	2677.8	2779.8	3344.4
42.5°	3335.6	3316.4	3209.2	3178.9	3141.2	3116.1	3066.5	3068.0	3005.9	3086.5	3687.4
45°	3515.9	3504.8	3394.7	3377.0	3417.6	3407.3	3450.1	3461.2	3340.7	3408.0	4043.6
47.5°	3709.6	3699.2	3606.1	3593.5	3703.6	3706.6	3858.1	3861.8	3667.4	3742.1	4400.6
50°	3948.3	3933.5	3841.1	3856.6	3980.1	3991.2	4268.3	4243.2	3968.2	4081.3	4754.6
52.5°	4105.7	4114.6	4094.6	4119.8	4288.3	4298.6	4671.9	4607.6	4266.1	4416.1	5102.0
55°	4221.8	4239.5	4301.6	4359.2	4613.5	4623.8	5052.5	4954.2	4513.0	4726.6	5428.7
57.5°	4371.0	4345.9	4462.0	4574.3	4922.4	4949.8	5422.8	5288.3	4731.7	4994.1	5652.7
60°	4585.4	4567.7	4657.8	4824.1	5268.3	5311.9	5814.5	5589.1	4892.1	5206.2	5696.3
62.5°	5020.0	4975.6	4989.7	5136.8	5704.4	5762.0	6256.5	5851.5	4971.9	5289.0	5462.7
65°	5669.7	5593.5	5522.6	5624.6	6318.6	6375.5	6755.4	6057.7	4942.4	5128.6	4842.6
67.5°	6487.8	6412.4	6325.2	6421.3	7223.2	7268.3	7371.1	6173.7	4709.6	4510.7	3746.5
70°	7162.6	7134.6	7238.8	7634.2	8668.2	8669.7	8160.4	6077.6	4071.7	3198.1	2167.8
72.5°	7073.2	7056.2	7605.4	8827.8	10489.3	10450.2	8907.7	5350.4	2742.8	1442.7	812.3
75°	5802.7	5912.8	6763.5	8806.4	11143.4	11138.3	8450.2	3401.3	1134.5	597.9	419.8
77.5°	3111.6	3286.0	4391.0	6501.9	8699.2	8830.1	5940.9	1190.0	487.1	382.9	290.5
80°	1014.8	1167.0	1750.2	3310.4	5652.7	5628.3	2546.2	467.1	333.3	271.3	201.0
82.5°	430.9	448.6	782.0	1563.2	2901.0	2855.9	810.8	268.3	234.3	185.5	124.2
85°	168.5	188.5	345.2	722.8	1256.5	1229.1	292.7	133.0	150.0	121.2	73.9
87.5°	55.4	67.3	123.4	247.6	391.0	376.9	71.7	45.8	65.0	55.4	26.6
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°	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9	1821.9
2.5°	1837.4	1849.2	1863.3	1884.0	1901.7	1916.5	1932.0	1941.6	1945.3	1956.4	1955.7
5°	1850.7	1876.6	1911.3	1945.3	1978.6	1998.5	2016.3	2025.1	2033.3	2039.2	2040.7
7.5°	1872.9	1906.1	1960.8	2005.2	2033.3	2049.5	2061.4	2058.4	2061.4	2062.8	2065.1
10°	1892.1	1938.7	2003.7	2045.8	2067.3	2068.0	2065.1	2054.7	2049.5	2050.3	2051.7
12.5°	1915.0	1966.8	2037.0	2072.4	2078.4	2062.1	2049.5	2031.8	2025.1	2022.2	2020.7
15°	1946.1	2005.2	2073.2	2086.5	2071.7	2051.0	2029.6	2000.7	1986.0	1974.1	1977.8
17.5°	1983.7	2048.8	2101.3	2091.7	2059.9	2025.9	1991.1	1947.5	1917.2	1904.7	1905.4
20°	2036.2	2094.6	2122.7	2080.6	2032.5	1980.8	1921.7	1868.4	1840.4	1827.8	1826.3
22.5°	2099.8	2156.0	2143.4	2061.4	1993.4	1910.6	1836.7	1797.5	1783.5	1774.6	1776.1
25°	2175.9	2224.0	2158.2	2033.3	1929.1	1817.5	1760.5	1748.0	1741.3	1734.7	1734.7
27.5°	2275.0	2300.8	2169.3	1991.9	1828.5	1718.4	1697.7	1699.9	1697.7	1686.6	1688.8
30°	2405.8	2400.6	2179.6	1924.6	1713.2	1629.0	1630.5	1640.1	1641.5	1634.2	1637.9
32.5°	2578.0	2525.5	2184.8	1837.4	1603.1	1550.6	1552.1	1562.5	1569.9	1557.3	1563.2
35°	2786.4	2671.1	2176.7	1728.0	1518.1	1476.0	1464.9	1467.9	1470.1	1458.2	1466.4
37.5°	3029.6	2834.5	2140.4	1606.8	1447.9	1402.8	1379.2	1359.2	1347.4	1336.3	1343.7
40°	3296.4	3012.6	2073.9	1488.6	1369.6	1325.2	1289.7	1252.0	1212.1	1197.3	1204.0
42.5°	3575.8	3195.9	1993.4	1375.5	1279.4	1243.2	1205.5	1150.8	1090.9	1060.6	1064.3
45°	3865.5	3383.6	1914.3	1263.9	1187.0	1171.5	1127.9	1062.1	997.0	958.6	955.7
47.5°	4149.3	3561.0	1798.2	1151.5	1100.5	1117.5	1083.5	1022.9	950.5	889.9	883.2
50°	4420.6	3727.3	1608.3	1037.7	1030.3	1101.3	1068.7	981.5	898.7	821.1	814.5
52.5°	4689.6	3861.8	1365.1	934.2	992.6	1096.8	1049.5	953.4	852.2	770.9	762.0
55°	4918.0	3931.3	1130.8	845.5	937.9	1059.1	1026.6	920.2	786.4	699.9	692.5
57.5°	5048.1	3875.1	935.7	758.3	862.5	997.0	987.4	849.2	708.1	641.5	632.7
60°	4991.9	3647.5	776.1	682.2	790.8	929.8	919.4	779.0	648.2	585.4	576.5
62.5°	4682.2	3213.6	649.7	615.7	725.8	861.1	851.4	725.1	602.4	541.8	532.2
65°	4058.4	2614.2	551.4	560.2	660.0	778.3	792.3	680.0	566.2	507.0	497.4
67.5°	3095.4	1893.6	474.5	512.2	595.7	697.0	737.6	647.5	535.8	479.7	470.8
70°	1764.2	1075.4	409.5	465.6	538.8	621.6	695.5	621.6	503.3	456.8	450.9
72.5°	668.9	493.7	354.0	419.1	484.1	558.0	648.9	580.9	465.6	430.9	425.0
75°	357.0	300.8	297.9	364.4	421.3	495.9	590.5	541.0	437.5	455.3	470.1
77.5°	243.2	212.9	249.1	311.9	352.6	427.2	528.5	480.4	379.2	377.7	348.1
80°	168.5	150.8	202.5	251.3	272.7	359.2	461.2	412.4	308.9	288.2	275.7
82.5°	101.3	98.3	151.5	187.7	192.9	277.2	382.1	345.9	252.8	220.3	221.7
85°	55.4	58.4	96.8	110.1	112.3	193.6	299.3	267.6	194.4	163.3	164.8
87.5°	15.5	20.0	35.5	43.6	54.0	100.5	178.1	158.9	97.6	68.0	68.0
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)