

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: P883579

Luminaire Tested: **NAV-SB4A-727-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883579
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16486 lumens
Efficiency: N/A
Efficacy: 144.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

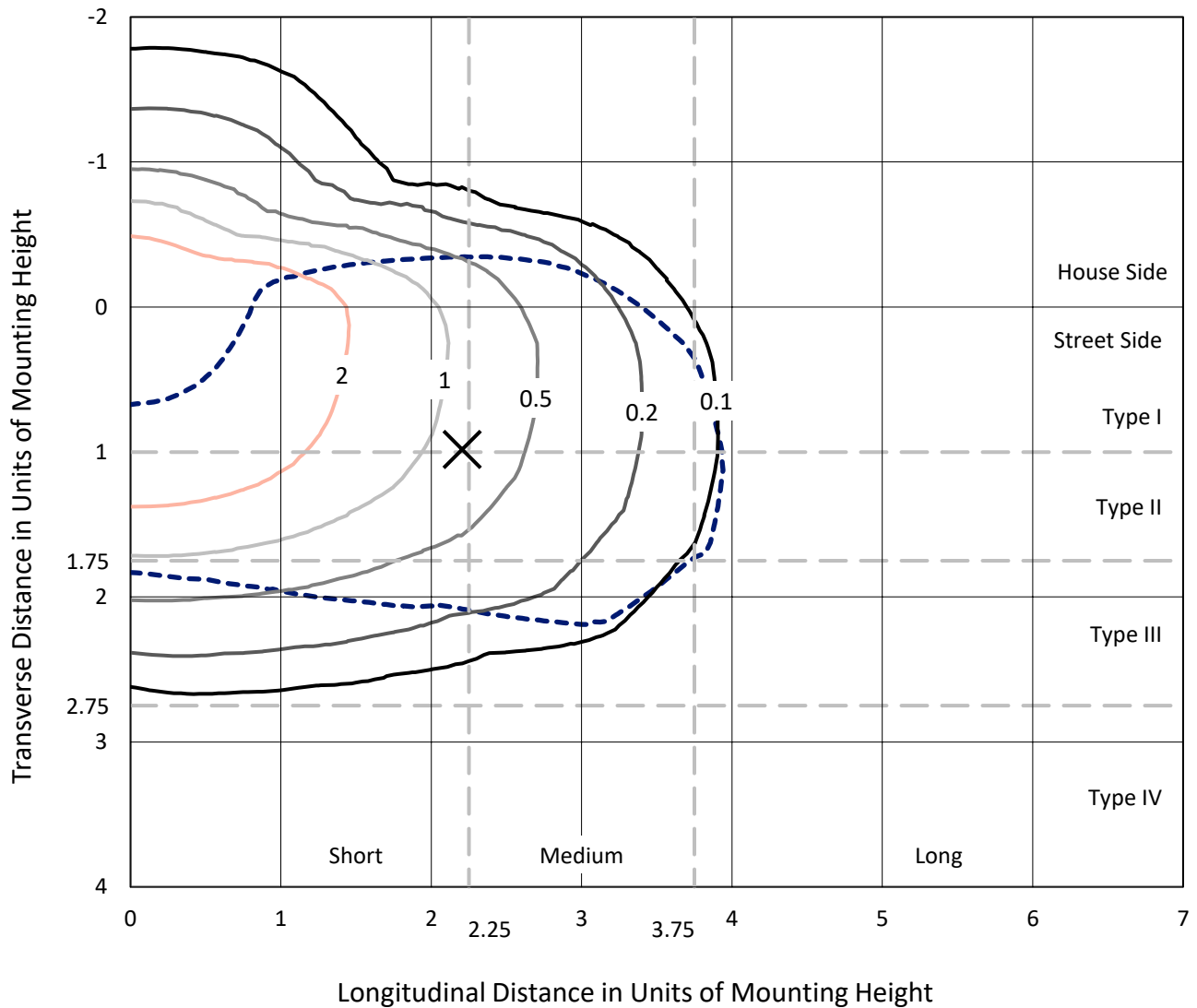
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

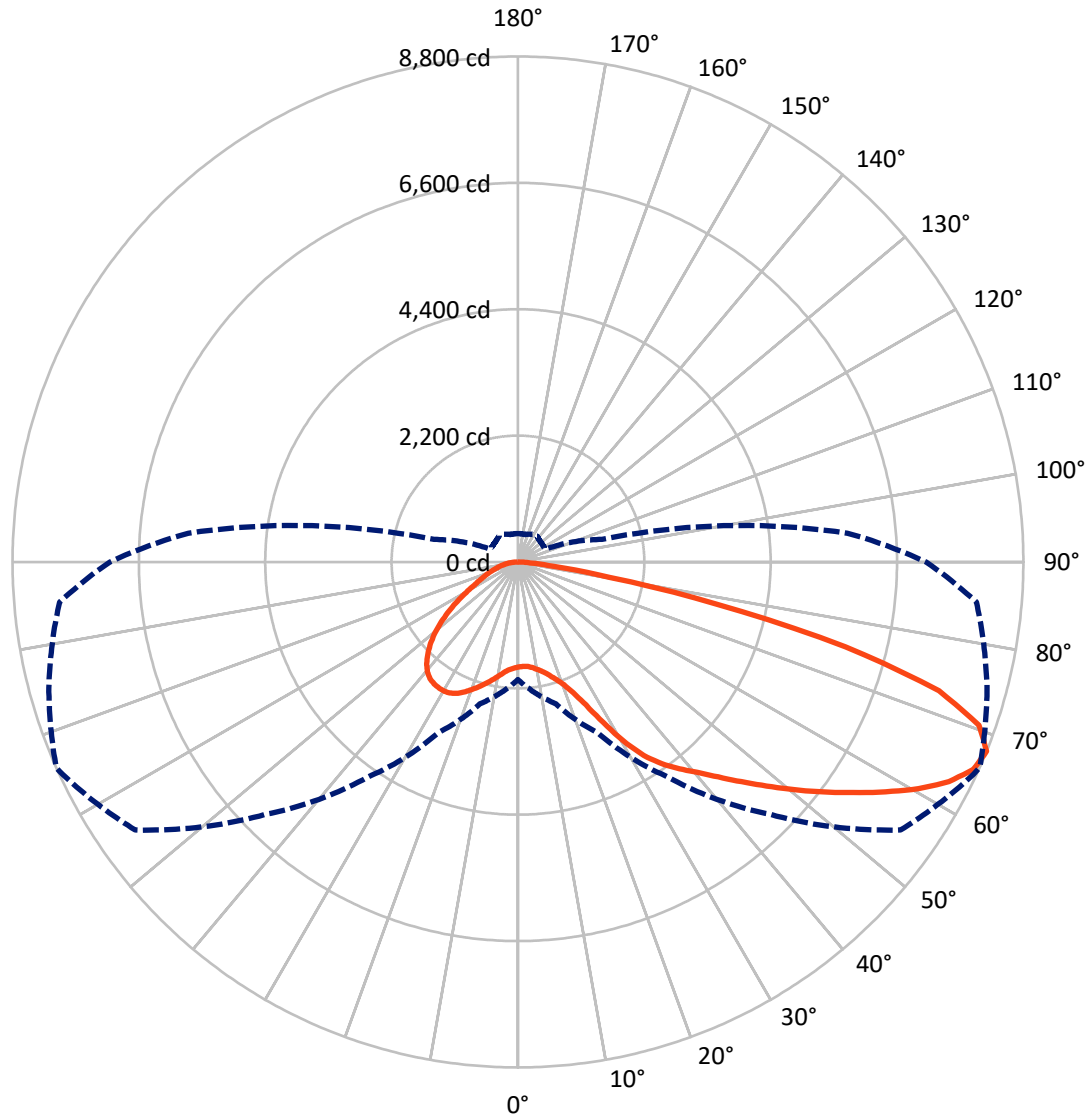
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4099.2	0.0	4099.2
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	12386.8	0.0	12386.8
	% Fixture	75.1	0.0	75.1
Total	Lumens	16486.0	0.0	16486.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.3	1.1
10°-20°	599.0	3.6
20°-30°	1154.5	7.0
30°-40°	2024.2	12.3
40°-50°	3009.3	18.3
50°-60°	3814.6	23.1
60°-70°	3732.5	22.6
70°-80°	1780.4	10.8
80°-90°	190.3	1.2
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°	16486.0	100.0
0°-180°	16486.0	100.0

Coefficient of Utilization



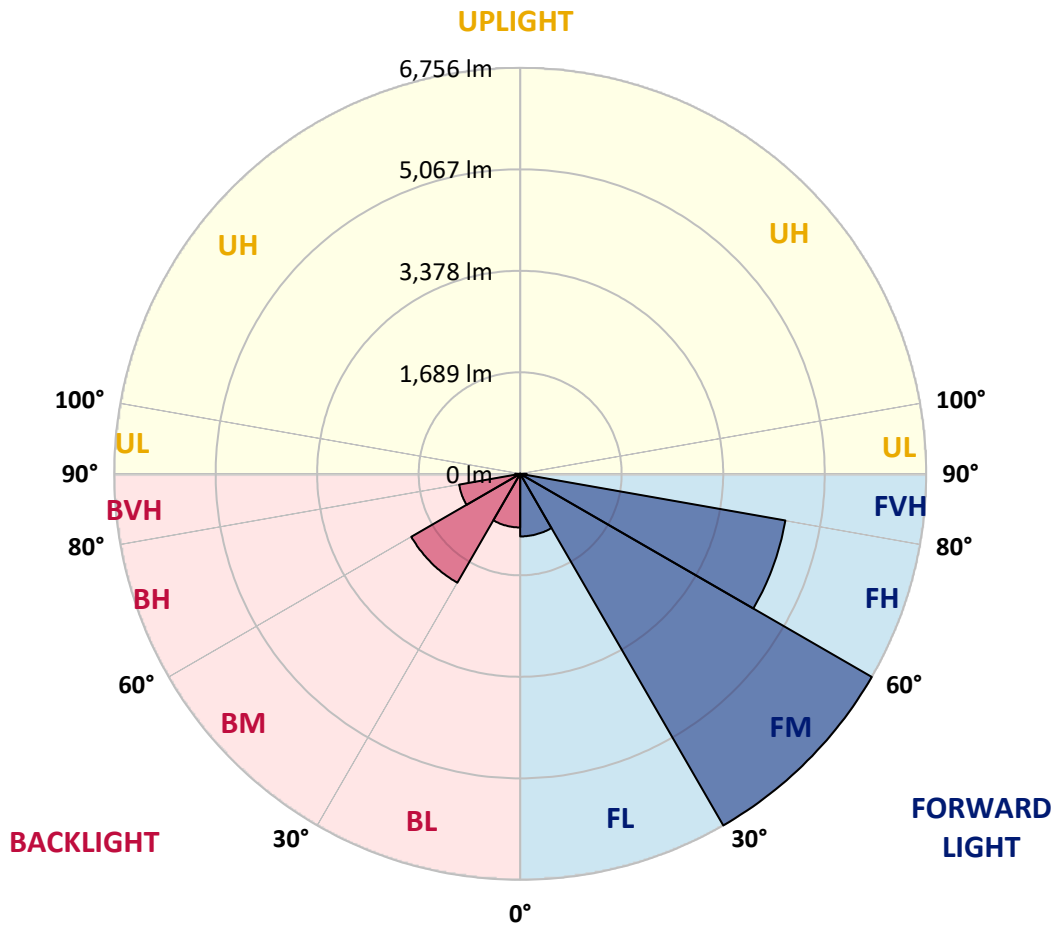
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1041.8	6.3			
FM (30°-60°)	6755.8	41.0			
FH (60°-80°)	4481.4	27.2			G2/5000
FVH (80°-90°)	107.9	0.7			G2/225
BL (0°-30°)	893.0	5.4	B2/1000		
BM (30°-60°)	2092.3	12.7	B2/2500		
BH (60°-80°)	1031.6	6.3	B3/2500		G3/2500
BVH (80°-90°)	82.4	0.5			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5
2.5°	1809.5	1819.9	1817.3	1812.9	1812.1	1813.8	1816.4	1819.0	1818.1	1822.5	1829.4
5°	1804.3	1814.7	1813.8	1813.8	1817.3	1824.2	1828.5	1832.8	1828.5	1833.7	1843.2
7.5°	1807.7	1815.5	1819.0	1822.5	1831.1	1844.1	1854.5	1864.0	1858.8	1864.9	1877.0
10°	1851.9	1858.0	1861.4	1861.4	1867.5	1882.2	1892.6	1909.9	1905.6	1915.1	1930.7
12.5°	1932.5	1938.5	1938.5	1935.1	1939.4	1948.9	1952.4	1971.4	1963.6	1979.2	1994.8
15°	2031.2	2043.3	2033.8	2027.7	2029.5	2039.0	2038.1	2052.9	2045.1	2058.1	2071.9
17.5°	2140.3	2155.9	2140.3	2139.5	2136.0	2146.4	2147.3	2160.3	2146.4	2155.9	2165.5
20°	2269.4	2291.1	2278.1	2282.4	2274.6	2278.9	2283.3	2302.3	2280.7	2287.6	2285.0
22.5°	2451.3	2477.3	2463.4	2479.9	2474.7	2471.2	2470.4	2504.1	2470.4	2473.0	2447.8
25°	2716.4	2747.5	2723.3	2745.8	2745.8	2757.1	2770.1	2813.4	2757.1	2740.6	2675.6
27.5°	3107.9	3139.1	3091.4	3105.3	3100.9	3128.7	3114.8	3222.2	3161.6	3134.7	3003.9
30°	3579.1	3634.5	3544.4	3541.0	3536.6	3580.8	3600.7	3671.8	3610.3	3583.4	3425.8
32.5°	4088.4	4146.4	4039.0	4007.8	3991.4	4018.2	4001.8	4058.9	4016.5	3974.9	3780.0
35°	4627.2	4684.3	4582.1	4521.5	4455.7	4399.4	4340.5	4355.2	4315.3	4252.1	4050.3
37.5°	5136.5	5241.3	5133.0	5068.0	4946.8	4836.8	4672.2	4603.8	4566.5	4508.5	4304.9
40°	5655.3	5715.1	5632.8	5577.4	5445.7	5273.3	5010.0	4865.4	4815.1	4758.8	4586.4
42.5°	6037.3	6094.5	6050.3	6012.2	5909.1	5709.0	5368.6	5187.6	5114.8	5051.6	4905.2
45°	6340.5	6382.9	6355.2	6369.1	6324.9	6130.9	5740.2	5533.2	5457.8	5380.7	5265.5
47.5°	6462.6	6507.6	6551.8	6634.1	6709.5	6566.5	6139.5	5907.4	5827.7	5748.9	5635.4
50°	6448.7	6494.7	6622.8	6797.8	7031.7	6984.0	6560.5	6305.8	6232.2	6142.1	6037.3
52.5°	6337.9	6389.8	6554.4	6845.5	7217.9	7296.7	6989.2	6717.3	6648.0	6540.6	6435.8
55°	6046.8	6078.0	6324.9	6737.2	7262.1	7515.0	7409.3	7155.5	7086.3	6936.4	6822.1
57.5°	5507.2	5552.2	5911.7	6445.3	7151.2	7663.1	7778.3	7616.4	7549.7	7334.0	7214.4
60°	4803.0	4874.9	5286.3	5955.0	6868.8	7662.3	8113.5	8069.4	8013.9	7725.5	7600.8
62.5°	4006.1	4089.3	4485.1	5262.1	6375.1	7444.9	8323.2	8448.8	8420.2	8086.7	7927.3
65°	3076.7	3133.9	3528.0	4365.6	5606.8	6978.0	8347.4	8707.8	8712.9	8361.3	8098.0
67.5°	2048.5	2213.1	2555.2	3275.9	4577.8	6214.9	8134.3	8750.2	8800.4	8455.7	8012.2
70°	999.6	1216.1	1551.3	2129.1	3275.9	5044.7	7577.4	8402.0	8513.7	8180.2	7501.2
72.5°	414.9	485.1	667.8	1050.7	1880.5	3404.1	6458.3	7457.8	7664.9	7248.2	6306.7
75°	279.8	303.2	382.0	538.8	856.7	1678.7	4657.5	5560.9	5894.4	5474.3	4474.7
77.5°	215.7	230.4	278.0	376.8	509.3	634.9	2492.9	3351.3	3523.6	3262.1	2328.3
80°	169.8	181.0	207.9	274.6	361.2	339.5	849.7	1518.4	1618.0	1357.3	748.4
82.5°	147.3	151.6	149.0	186.2	239.9	198.4	278.9	560.4	618.5	448.7	244.3
85°	106.5	118.7	123.9	115.2	127.3	100.5	114.3	198.4	218.3	194.9	137.7
87.5°	43.3	64.1	78.8	74.5	46.8	28.6	35.5	58.0	66.7	72.8	45.0
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°	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5	1828.5
2.5°	1830.2	1836.3	1840.6	1845.8	1849.3	1854.5	1864.9	1871.0	1871.8	1876.2	1875.3
5°	1846.7	1855.4	1864.9	1878.8	1894.3	1907.3	1927.3	1941.1	1946.3	1950.6	1949.8
7.5°	1882.2	1894.3	1911.7	1935.9	1958.4	1975.8	2000.0	2016.5	2032.9	2039.0	2039.9
10°	1935.1	1952.4	1977.5	2010.4	2034.7	2057.2	2082.3	2096.2	2112.6	2119.6	2123.0
12.5°	2000.9	2019.1	2052.0	2097.9	2120.4	2136.0	2144.7	2141.2	2144.7	2150.7	2152.5
15°	2076.2	2096.2	2133.4	2182.8	2198.4	2184.5	2165.5	2148.1	2145.5	2147.3	2153.3
17.5°	2165.5	2180.2	2223.5	2265.1	2253.8	2196.6	2155.1	2127.3	2113.5	2109.2	2115.2
20°	2290.2	2290.2	2325.7	2351.7	2276.3	2179.3	2114.4	2069.3	2040.7	2028.6	2026.0
22.5°	2441.8	2427.9	2450.4	2432.2	2272.0	2130.8	2040.7	1962.8	1919.5	1902.1	1899.5
25°	2634.1	2617.6	2611.5	2498.9	2240.8	2053.7	1907.3	1812.9	1774.8	1765.3	1767.0
27.5°	2924.2	2882.7	2803.8	2535.3	2183.7	1932.5	1751.4	1663.9	1642.3	1643.2	1645.8
30°	3310.6	3227.4	3034.2	2541.4	2090.1	1761.0	1592.0	1529.7	1519.3	1523.6	1538.3
32.5°	3668.3	3589.5	3269.8	2513.7	1946.3	1592.9	1449.1	1407.5	1392.0	1397.2	1404.1
35°	3948.9	3927.3	3488.1	2474.7	1769.6	1435.3	1320.9	1285.4	1255.1	1248.2	1253.4
37.5°	4214.0	4205.3	3651.8	2420.1	1594.6	1323.5	1217.9	1171.1	1126.9	1102.7	1103.5
40°	4505.0	4496.4	3759.2	2336.1	1439.6	1226.5	1125.2	1063.7	1009.1	964.9	969.3
42.5°	4832.4	4781.3	3810.3	2215.7	1307.9	1144.2	1049.8	966.7	894.8	854.1	856.7
45°	5190.2	5075.0	3809.5	2062.4	1197.1	1068.9	969.3	851.5	784.8	746.7	744.9
47.5°	5569.6	5355.6	3762.7	1892.6	1089.7	985.7	844.5	754.4	710.3	686.9	681.7
50°	5961.1	5618.1	3683.0	1697.7	979.7	891.3	766.6	705.1	671.3	649.6	641.8
52.5°	6329.2	5856.3	3586.9	1476.8	867.9	799.5	731.9	684.3	648.8	624.5	614.1
55°	6671.4	6061.6	3450.9	1250.8	777.0	738.0	715.5	675.6	634.9	606.3	595.1
57.5°	6975.4	6195.0	3216.1	1038.6	712.0	695.5	698.1	660.9	614.1	589.9	574.3
60°	7228.3	6292.8	2868.8	841.9	659.2	654.0	671.3	633.2	578.6	550.9	538.8
62.5°	7379.9	6291.1	2442.6	689.5	614.1	615.9	635.8	598.5	543.1	517.1	509.3
65°	7366.9	6136.9	1974.9	589.9	570.8	572.5	598.5	560.4	513.6	498.1	497.2
67.5°	7106.2	5761.0	1515.0	524.9	523.2	531.0	561.3	534.4	495.5	493.7	496.3
70°	6400.2	4980.6	1091.4	472.9	473.8	485.1	524.9	518.0	485.9	489.4	488.5
72.5°	5132.1	3797.4	732.8	418.4	419.2	437.4	490.3	505.0	476.4	522.3	529.2
75°	3418.0	2368.1	471.2	360.3	361.2	384.6	459.9	479.9	450.4	520.6	524.9
77.5°	1642.3	1064.5	341.3	303.2	303.2	324.8	397.6	429.6	383.7	404.5	370.7
80°	567.4	400.2	268.5	244.3	239.1	253.8	335.2	372.5	330.9	304.9	285.8
82.5°	223.5	207.9	215.7	189.7	172.4	181.9	260.7	307.5	243.4	220.0	219.1
85°	128.2	135.1	152.4	125.6	99.6	111.7	191.4	220.9	183.6	162.0	165.4
87.5°	34.6	47.6	70.2	65.0	45.0	47.6	90.9	122.1	105.7	81.4	84.0
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)