

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: P962897

Luminaire Tested: **NAV-SB2D-722-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962897
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-722-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17461.9 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

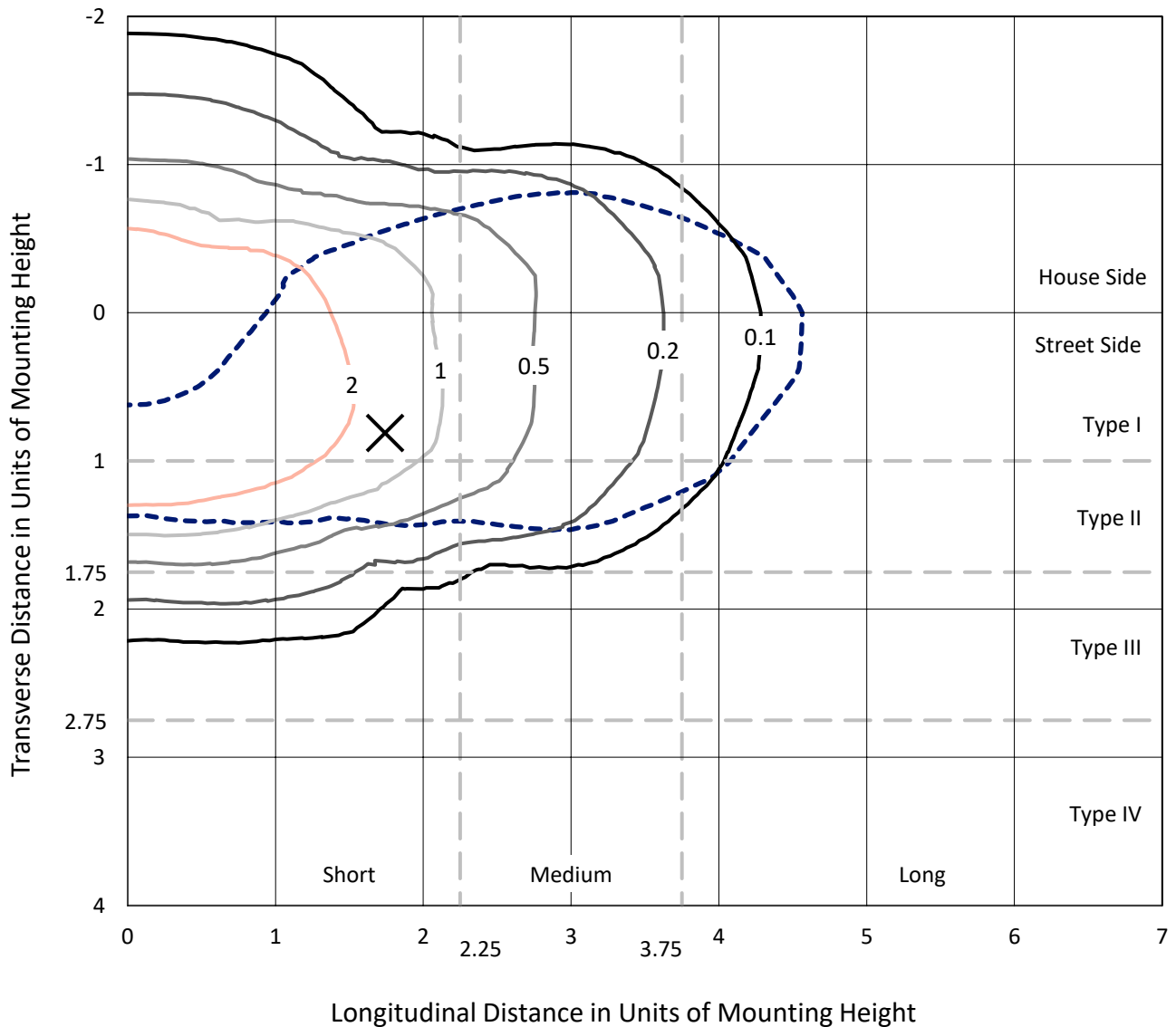
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

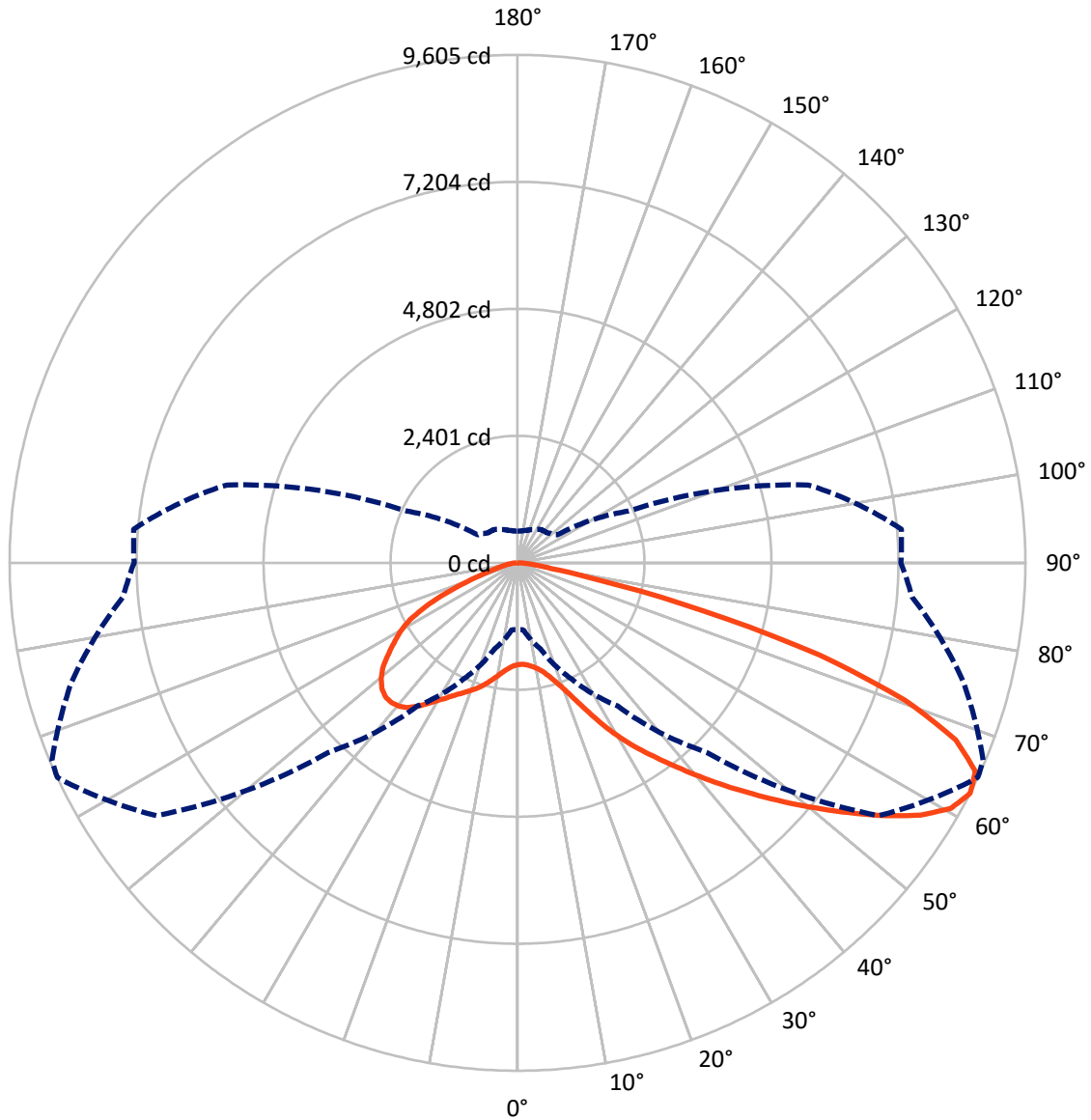
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5510.2	0.0	5510.2
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	11951.7	0.0	11951.7
	% Fixture	68.4	0.0	68.4
Total	Lumens	17461.9	0.0	17461.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.8	1.1
10°-20°	650.6	3.7
20°-30°	1319.1	7.6
30°-40°	2282.6	13.1
40°-50°	3454.3	19.8
50°-60°	4050.0	23.2
60°-70°	3395.4	19.4
70°-80°	1874.5	10.7
80°-90°	243.5	1.4
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°	17461.9	100.0
0°-180°	17461.9	100.0

Coefficient of Utilization



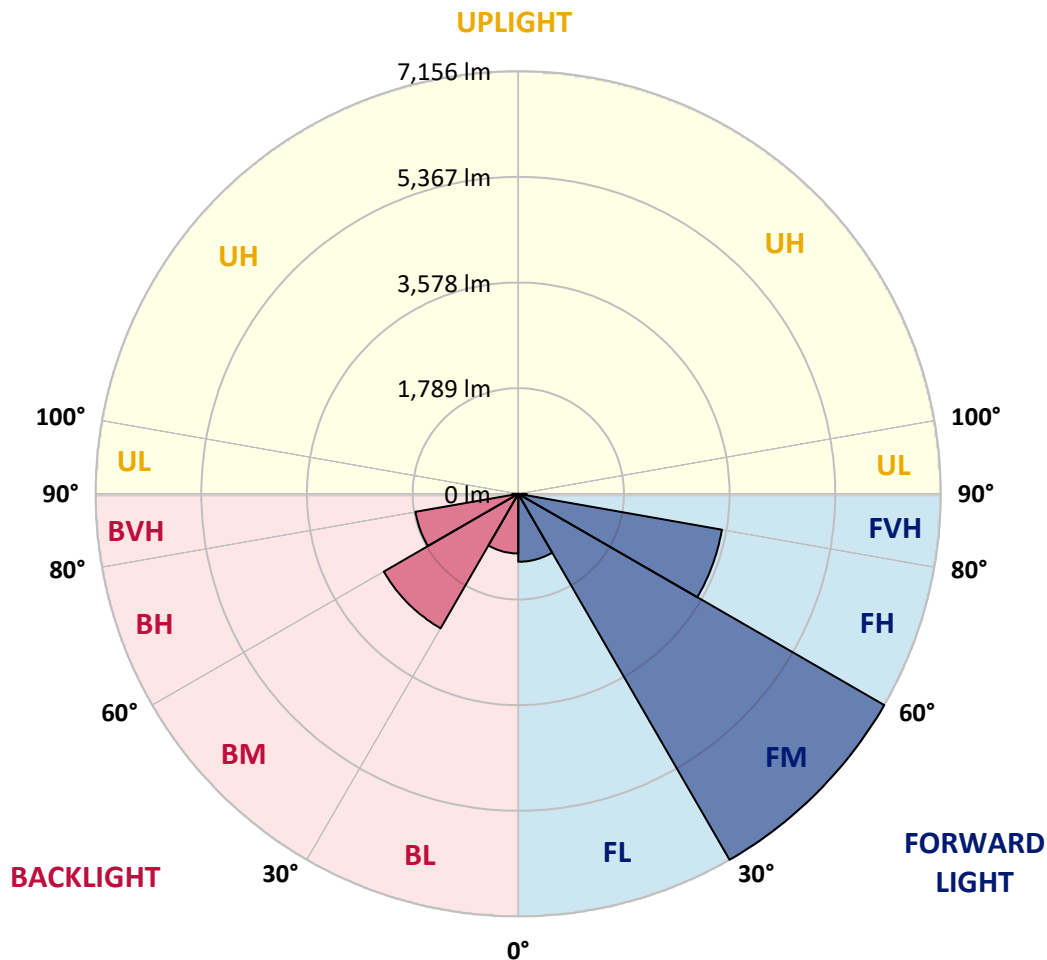
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1151.0	6.6			
FM (30°-60°)	7156.4	41.0			
FH (60°-80°)	3502.3	20.1			G2/5000
FVH (80°-90°)	141.9	0.8			G2/225
BL (0°-30°)	1010.5	5.8	B3/2500		
BM (30°-60°)	2630.5	15.1	B3/5000		
BH (60°-80°)	1767.6	10.1	B3/2500		G3/2500
BVH (80°-90°)	101.6	0.6			G2/225
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2
2.5°	1911.5	1906.1	1910.6	1910.6	1912.4	1911.5	1917.9	1919.7	1922.4	1927.8	1927.8
5°	1892.6	1891.6	1899.7	1907.0	1914.3	1920.6	1928.7	1940.5	1942.4	1948.7	1956.8
7.5°	1886.2	1880.8	1893.4	1902.5	1919.7	1935.1	1956.8	1976.8	1984.9	1987.7	2003.1
10°	1935.1	1926.1	1937.9	1943.3	1957.7	1973.1	1998.5	2030.2	2039.2	2050.1	2067.3
12.5°	2018.4	2008.5	2025.7	2033.8	2047.4	2061.1	2078.2	2109.0	2113.5	2133.5	2149.8
15°	2132.6	2120.8	2131.7	2141.6	2164.3	2177.0	2194.2	2224.0	2224.0	2239.5	2251.3
17.5°	2287.5	2272.1	2280.2	2283.9	2298.4	2317.4	2346.4	2372.7	2386.3	2380.9	2364.5
20°	2518.5	2499.5	2499.5	2481.4	2476.0	2491.4	2529.4	2565.7	2580.1	2552.0	2512.2
22.5°	2865.5	2838.3	2823.0	2761.4	2736.9	2738.7	2776.7	2821.1	2832.9	2783.1	2693.4
25°	3306.6	3264.1	3243.3	3152.7	3097.4	3049.4	3079.3	3136.4	3152.7	3091.1	2946.2
27.5°	3747.9	3750.6	3730.7	3621.9	3530.5	3442.6	3427.2	3486.9	3504.2	3434.5	3255.1
30°	4366.6	4302.3	4264.3	4133.8	4003.3	3880.1	3816.8	3841.2	3845.7	3762.4	3554.0
32.5°	4900.2	4883.9	4802.4	4688.2	4520.7	4327.7	4221.7	4182.7	4175.5	4056.8	3809.5
35°	5508.1	5499.1	5413.0	5277.1	5095.9	4827.8	4636.6	4525.2	4516.2	4349.5	4062.3
37.5°	6126.0	6126.0	6041.8	5893.1	5705.7	5370.5	5079.6	4903.0	4874.0	4656.6	4319.6
40°	6618.8	6588.9	6604.4	6541.9	6327.1	5971.0	5571.6	5315.1	5276.2	5015.3	4593.1
42.5°	6898.8	6888.8	6981.2	7051.0	6963.1	6678.6	6113.3	5761.8	5707.4	5410.3	4908.4
45°	6961.3	6950.4	7115.2	7370.8	7494.0	7377.1	6702.2	6232.0	6165.9	5823.4	5246.4
47.5°	6817.3	6795.4	7037.3	7440.5	7835.5	8041.1	7339.9	6742.0	6646.0	6225.6	5593.3
50°	6384.2	6363.3	6729.3	7264.8	7950.6	8492.3	8032.1	7282.9	7136.2	6656.9	5943.9
52.5°	5443.0	5452.9	6026.4	6761.9	7799.2	8773.2	8628.2	7852.7	7676.0	7098.0	6272.8
55°	4239.8	4261.5	4966.4	5776.3	7194.1	8730.5	9035.0	8439.7	8264.1	7513.0	6612.5
57.5°	3035.8	3131.9	3792.3	4594.0	6031.8	8055.7	9123.7	8997.9	8827.5	7966.0	6945.0
60°	1967.7	1984.9	2664.4	3472.5	4593.1	6856.2	8943.4	9420.9	9287.7	8428.0	7223.1
62.5°	1261.1	1272.8	1686.8	2428.8	3305.8	5072.4	8336.5	9604.9	9564.1	8733.3	7490.4
65°	926.8	917.7	1133.3	1605.4	2226.8	3128.2	7157.9	9516.0	9596.7	8924.5	7711.4
67.5°	773.7	761.0	866.9	1111.6	1640.6	1776.5	5296.2	8938.9	9234.3	8902.7	7873.5
70°	704.8	693.9	758.3	825.3	1280.1	1189.5	2669.8	7771.1	8225.9	8655.4	7847.3
72.5°	597.1	578.0	665.8	732.9	995.6	912.2	1103.4	5969.3	6523.7	7862.7	7477.7
75°	462.9	450.3	525.4	645.0	748.4	712.1	697.6	3624.7	4229.9	6080.7	6541.9
77.5°	367.0	349.7	418.5	502.8	673.1	537.2	508.2	1561.0	2160.7	3882.0	4894.8
80°	276.3	260.9	318.0	397.7	517.3	405.0	328.8	636.8	814.5	1966.8	2461.4
82.5°	196.6	183.0	221.9	291.7	347.9	363.3	202.0	356.9	401.3	758.3	549.9
85°	126.0	117.8	148.6	183.0	221.1	233.7	123.2	186.7	204.7	312.5	229.2
87.5°	68.9	56.2	79.7	85.2	102.4	93.3	58.9	68.0	73.4	113.3	97.0
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°	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2	1924.2
2.5°	1931.5	1934.2	1943.3	1946.0	1952.3	1960.4	1966.0	1971.4	1971.4	1976.8	1976.8
5°	1957.7	1964.1	1983.1	1993.1	2009.4	2025.7	2035.6	2047.4	2054.7	2058.3	2060.1
7.5°	2008.5	2018.4	2045.6	2062.8	2090.9	2113.5	2128.9	2145.3	2148.9	2158.9	2155.3
10°	2077.4	2089.2	2119.9	2152.5	2186.0	2214.1	2228.7	2240.4	2245.0	2246.7	2242.2
12.5°	2156.2	2173.4	2213.2	2253.1	2288.4	2312.9	2316.5	2313.7	2301.1	2290.3	2290.3
15°	2253.1	2268.5	2312.9	2356.4	2390.8	2395.3	2372.7	2358.2	2342.7	2340.1	2340.1
17.5°	2369.1	2377.2	2418.0	2460.5	2463.3	2447.9	2414.4	2400.8	2386.3	2376.3	2377.2
20°	2504.1	2501.3	2530.3	2548.5	2529.4	2482.2	2431.5	2409.0	2394.4	2382.6	2383.5
22.5°	2665.3	2644.5	2640.8	2636.3	2585.6	2486.9	2418.0	2389.0	2366.3	2350.0	2355.4
25°	2899.9	2820.2	2764.9	2734.2	2620.0	2462.4	2374.5	2310.1	2267.6	2239.5	2250.4
27.5°	3193.5	3059.4	2919.8	2844.7	2620.0	2412.5	2269.4	2165.2	2095.4	2066.5	2081.0
30°	3473.4	3333.0	3127.3	2977.8	2613.6	2331.0	2100.0	1955.0	1873.5	1844.5	1861.7
32.5°	3712.6	3559.4	3347.4	3123.7	2598.3	2198.7	1889.8	1729.5	1650.7	1616.2	1633.4
35°	3934.6	3771.5	3568.5	3284.0	2557.5	2004.9	1658.8	1536.5	1448.6	1393.4	1411.4
37.5°	4161.9	3968.1	3777.7	3429.0	2484.1	1778.4	1481.2	1377.0	1273.8	1199.5	1219.4
40°	4409.2	4177.3	4001.6	3515.0	2363.6	1562.7	1343.5	1248.3	1138.8	1060.0	1075.3
42.5°	4698.2	4428.2	4250.7	3559.4	2198.7	1409.7	1253.8	1160.5	1057.3	992.9	1005.6
45°	5000.0	4704.5	4478.1	3558.6	2014.8	1338.0	1224.9	1132.4	1018.2	951.2	962.1
47.5°	5316.1	4993.6	4674.7	3500.6	1855.4	1348.1	1208.6	1071.7	945.8	880.6	889.6
50°	5633.2	5309.7	4865.0	3391.8	1787.4	1326.4	1147.8	986.6	838.0	779.1	782.7
52.5°	5947.6	5645.8	5028.9	3237.0	1718.6	1245.7	1069.9	876.1	793.7	752.9	752.9
55°	6263.7	5978.3	5207.4	3011.3	1546.4	1151.5	939.5	834.4	758.3	721.1	717.5
57.5°	6580.8	6362.5	5376.7	2785.7	1329.9	1035.5	867.9	783.6	722.9	691.3	685.8
60°	6910.6	6801.8	5551.6	2578.3	1116.1	886.9	815.4	742.9	681.3	646.0	643.2
62.5°	7250.2	7285.6	5688.4	2311.1	919.5	796.3	768.2	693.9	634.2	600.6	599.7
65°	7592.7	7752.2	5778.1	1940.5	745.6	710.2	717.5	640.5	579.8	550.8	549.9
67.5°	7850.9	8088.3	5752.7	1468.5	611.5	628.7	654.1	584.4	527.3	504.6	505.5
70°	7879.9	8048.4	5502.7	1005.6	511.9	549.0	583.4	529.1	470.2	453.9	454.8
72.5°	7494.0	7504.8	4806.0	656.8	433.1	482.0	509.1	472.9	415.8	399.5	398.6
75°	6482.0	6206.6	3528.7	433.1	362.3	414.0	439.4	414.0	358.7	362.3	349.7
77.5°	4911.1	4395.6	2142.6	308.0	302.6	347.9	382.3	364.2	317.0	356.1	313.4
80°	2530.3	2378.1	955.8	230.1	239.1	278.1	314.4	290.8	250.9	239.1	218.3
82.5°	579.8	674.0	376.9	164.9	173.0	200.2	240.1	218.3	180.3	152.2	150.4
85°	203.0	221.9	166.7	103.3	101.5	125.0	163.1	145.9	122.3	97.9	103.3
87.5°	64.4	84.3	62.5	41.7	43.5	56.2	75.2	68.9	57.1	37.1	38.9
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)