

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: P883910

Luminaire Tested: **NAV-SB4C-722-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883910  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4C-722-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

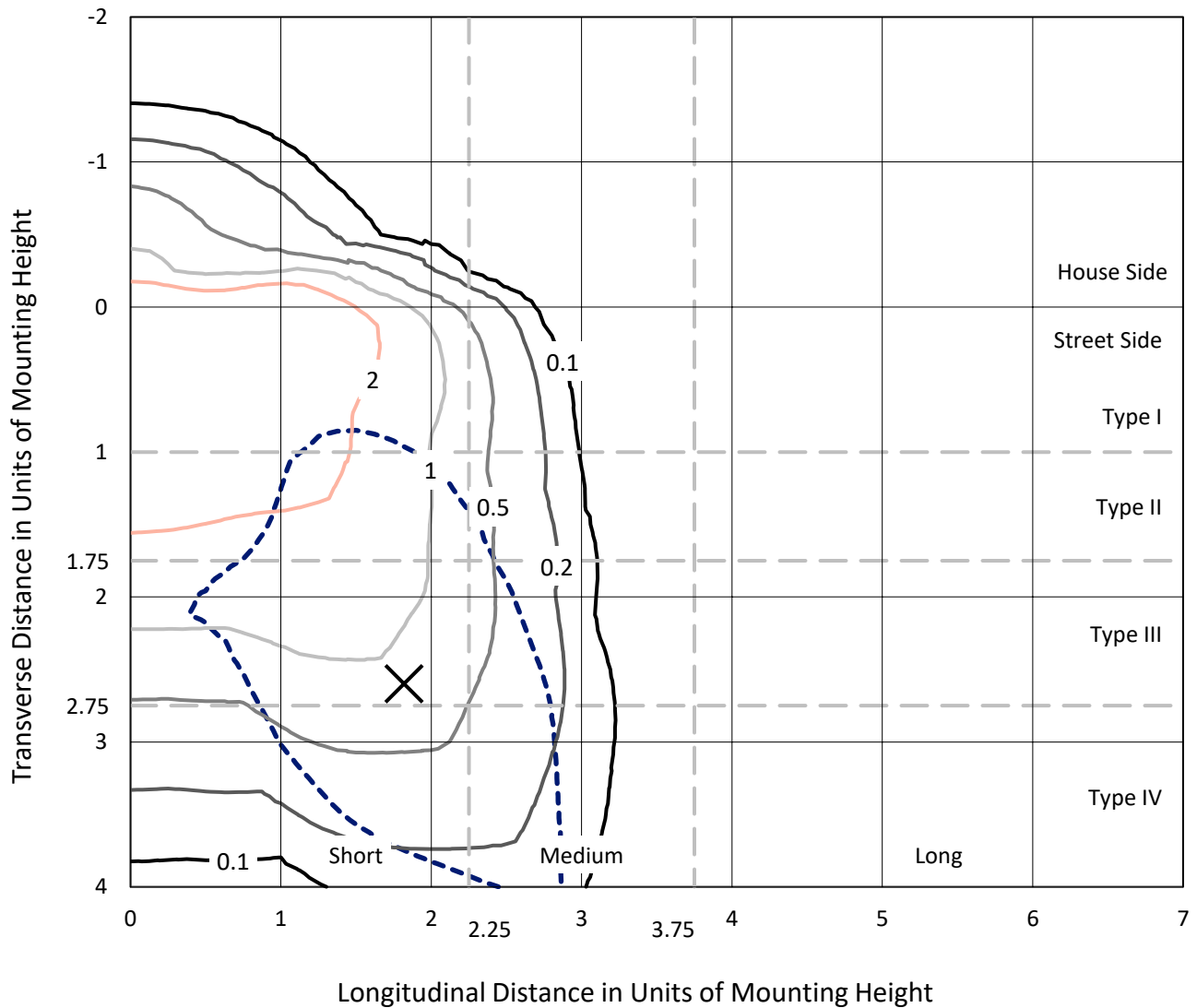
Lumens per Lamp: N/A  
Luminaire Lumens: 18312 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 200.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.714  
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

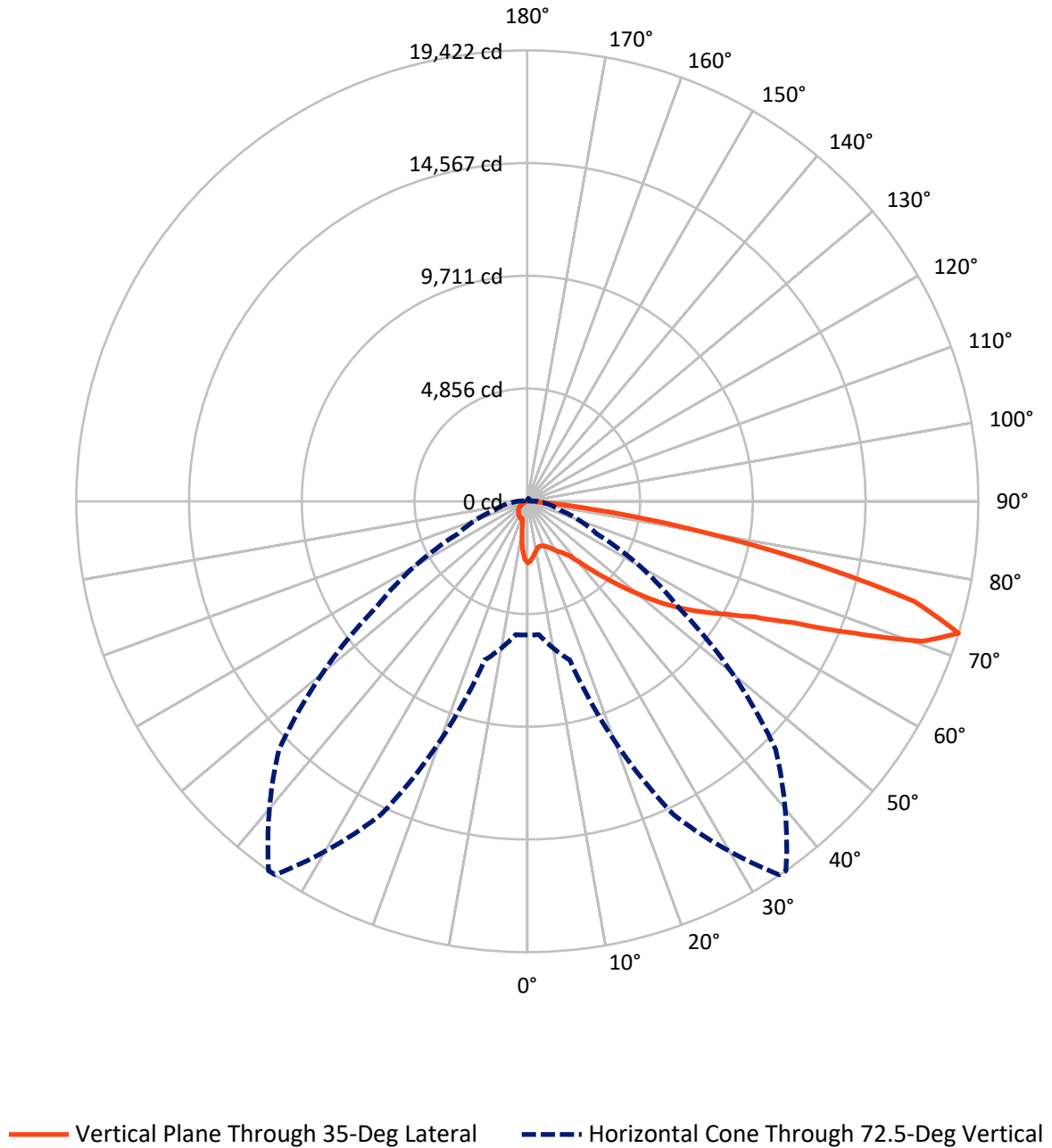
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2060.9	0.0	2060.9
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	16251.1	0.0	16251.1
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	18312.0	0.0	18312.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.1	1.2
10°-20°	510.2	2.8
20°-30°	828.8	4.5
30°-40°	1382.8	7.6
40°-50°	2616.4	14.3
50°-60°	4157.4	22.7
60°-70°	5143.0	28.1
70°-80°	3196.9	17.5
80°-90°	258.4	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°	18312.0	100.0
0°-180°	18312.0	100.0

**Coefficient of Utilization**



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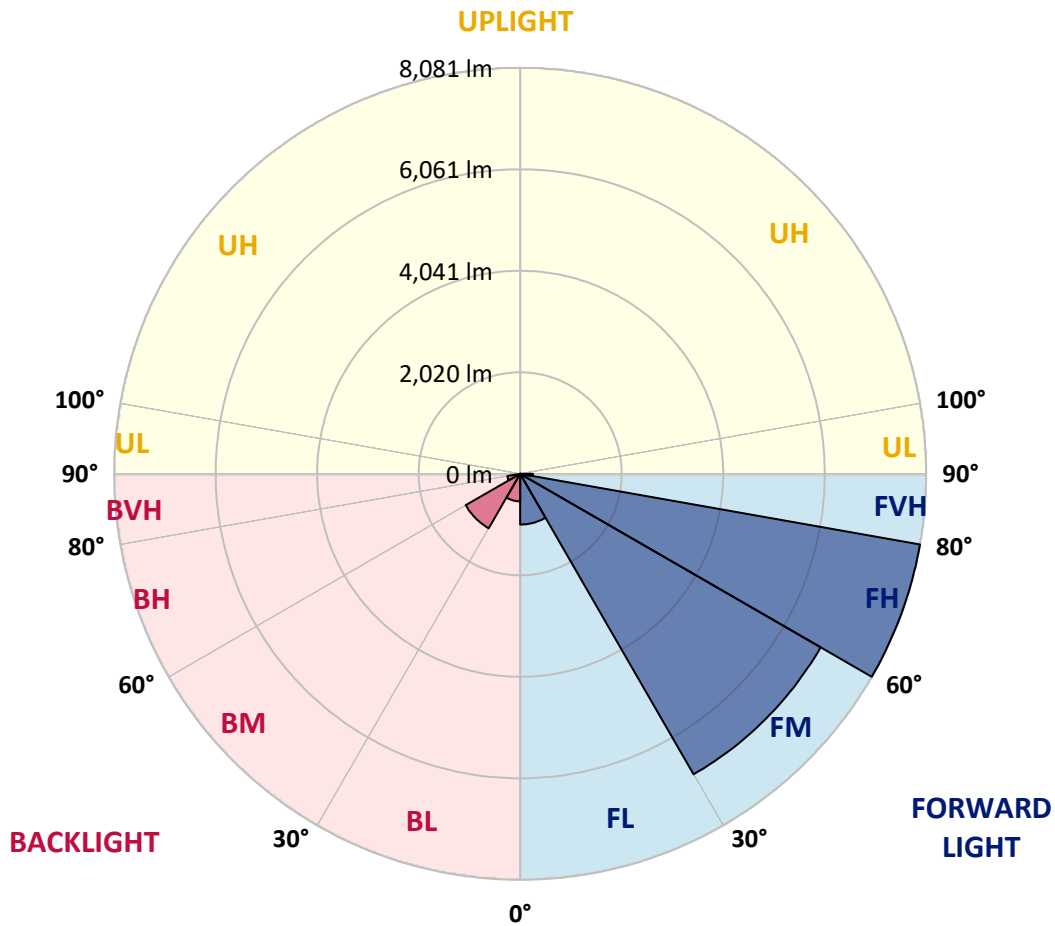
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1009.5	5.5			
FM (30°-60°)	6905.5	37.7			
FH (60°-80°)	8081.3	44.1			G4/12000
FVH (80°-90°)	254.8	1.4			G3/500
BL (0°-30°)	547.6	3.0	B2/1000		
BM (30°-60°)	1251.2	6.8	B2/2500		
BH (60°-80°)	258.6	1.4	B1/500		G1/500
BVH (80°-90°)	3.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0
2.5°	2535.9	2557.4	2561.4	2568.1	2568.1	2576.2	2589.6	2608.4	2639.3	2655.4	2666.1
5°	2337.4	2353.5	2373.6	2389.7	2420.6	2424.6	2476.9	2527.9	2599.0	2652.7	2690.3
7.5°	2137.4	2156.2	2183.1	2222.0	2262.2	2274.3	2353.5	2439.3	2552.0	2652.7	2715.7
10°	1996.6	1997.9	2022.0	2061.0	2125.4	2140.1	2236.7	2358.8	2499.7	2636.6	2739.9
12.5°	1917.4	1926.8	1937.5	1967.0	2028.8	2038.1	2141.5	2285.0	2447.4	2627.2	2768.1
15°	1917.4	1924.1	1930.8	1945.6	1995.2	2003.3	2094.5	2238.1	2420.6	2631.2	2813.7
17.5°	1937.5	1948.3	1942.9	1960.3	2012.7	2018.0	2098.5	2224.7	2419.2	2656.7	2883.5
20°	1985.8	1993.9	1983.1	1993.9	2046.2	2056.9	2140.1	2250.1	2442.0	2701.0	2970.7
22.5°	2062.3	2066.3	2040.8	2048.9	2102.6	2116.0	2212.6	2322.6	2497.0	2772.1	3087.4
25°	2158.9	2167.0	2128.0	2137.4	2188.4	2204.5	2315.9	2431.3	2584.3	2870.0	3236.4
27.5°	2270.3	2274.3	2240.8	2239.4	2305.2	2328.0	2440.7	2565.5	2701.0	2993.5	3424.2
30°	2397.7	2409.8	2377.6	2372.3	2455.4	2474.2	2585.6	2730.5	2872.7	3178.7	3691.2
32.5°	2498.4	2507.8	2489.0	2502.4	2586.9	2601.7	2761.4	2964.0	3142.4	3441.6	4054.8
35°	2643.3	2648.7	2605.7	2629.9	2726.5	2764.0	3001.5	3291.4	3481.9	3771.7	4529.8
37.5°	3167.9	3167.9	2985.4	2866.0	2958.6	2992.1	3330.3	3703.3	3900.5	4214.5	5128.2
40°	3893.8	3881.7	3614.7	3370.5	3358.5	3424.2	3798.6	4222.6	4441.3	4745.8	5801.8
42.5°	4668.0	4649.2	4285.6	4044.1	4003.8	4026.7	4339.3	4862.6	5085.3	5393.9	6526.4
45°	5355.0	5349.6	5016.9	4692.2	4619.7	4692.2	5014.2	5611.3	5771.0	6095.7	7249.6
47.5°	5930.6	5930.6	5687.8	5475.8	5438.2	5481.1	5927.9	6441.8	6427.1	6843.0	7954.0
50°	6593.5	6588.1	6357.3	6266.1	6305.0	6365.4	6979.9	7316.7	7106.0	7577.0	8583.3
52.5°	7057.7	7089.9	7010.8	6996.0	7194.6	7299.2	8047.9	8172.7	7713.8	8273.4	9054.3
55°	7425.4	7462.9	7554.2	7657.5	8039.9	8176.8	9082.4	8984.5	8222.4	8877.2	9325.3
57.5°	7946.0	7892.3	8033.2	8237.1	8855.7	9020.7	10084.7	9750.6	8631.6	9366.9	9354.8
60°	8577.9	8586.0	8610.1	8867.8	9670.1	9882.1	11072.3	10475.2	8894.6	9667.5	9027.4
62.5°	9337.4	9349.5	9399.1	9794.9	10763.7	10963.6	12124.2	11068.3	9015.4	9582.9	8182.1
65°	9285.1	9336.0	9890.2	11244.0	12426.1	12623.4	13352.0	11484.2	8832.9	8810.1	6661.9
67.5°	8458.5	8541.7	9468.9	12974.9	14932.6	15152.6	14836.0	11566.1	8045.3	6851.1	4346.0
70°	7374.4	7403.9	8518.9	14531.4	17834.8	18057.6	16164.3	10665.7	6105.1	3821.4	1946.9
72.5°	5758.9	5765.6	7073.8	14892.3	19410.1	19422.1	15121.8	7917.8	3283.3	1467.9	676.3
75°	4113.9	4073.6	4737.8	12077.3	17076.7	17213.6	11336.6	3714.0	1254.6	693.7	336.8
77.5°	2205.9	2250.1	2680.9	7162.4	11796.8	12030.3	6185.6	1070.7	638.7	472.3	222.7
80°	681.6	719.2	1098.9	3279.3	6682.0	6822.9	2293.1	476.3	445.5	336.8	146.3
82.5°	214.7	222.7	512.6	1378.0	2773.4	2837.8	664.2	269.7	304.6	222.7	85.9
85°	61.7	63.1	228.1	513.9	685.6	699.1	186.5	104.7	174.4	138.2	44.3
87.5°	6.7	21.5	85.9	85.9	60.4	59.0	20.1	22.8	49.6	17.4	8.1
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°	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0	2654.0
2.5°	2659.4	2660.7	2643.3	2613.8	2581.6	2554.7	2521.2	2494.4	2475.6	2470.2	2479.6
5°	2678.2	2668.8	2619.1	2529.2	2421.9	2329.3	2226.0	2144.1	2090.5	2067.7	2075.7
7.5°	2706.4	2679.5	2570.8	2393.7	2188.4	2005.9	1820.8	1677.2	1586.0	1540.4	1547.1
10°	2730.5	2676.8	2490.3	2197.8	1883.8	1607.4	1357.9	1184.8	1088.2	1042.6	1043.9
12.5°	2753.3	2675.5	2385.7	1965.7	1540.4	1202.2	970.1	884.2	857.4	848.0	845.3
15°	2796.3	2679.5	2254.2	1700.0	1198.2	908.4	823.8	822.5	827.9	825.2	823.8
17.5°	2855.3	2683.5	2105.2	1418.3	924.5	801.0	797.0	809.1	817.1	813.1	811.8
20°	2931.8	2699.6	1946.9	1139.2	794.3	774.2	783.6	794.3	801.0	794.3	793.0
22.5°	3039.1	2727.8	1773.8	915.1	752.7	758.1	766.2	778.2	784.9	775.5	774.2
25°	3170.6	2772.1	1603.4	795.7	732.6	739.3	751.4	764.8	772.9	763.5	762.1
27.5°	3341.0	2843.2	1446.4	768.8	712.5	716.5	733.9	754.1	764.8	752.7	752.7
30°	3587.9	2959.9	1310.9	780.9	700.4	691.0	715.2	743.3	755.4	744.7	743.3
32.5°	3915.3	3125.0	1227.7	799.7	695.0	661.5	684.3	720.5	740.7	733.9	733.9
35°	4344.7	3375.9	1195.5	821.2	691.0	630.6	646.7	685.6	720.5	727.2	727.2
37.5°	4865.3	3724.8	1204.9	830.6	678.9	605.1	613.2	646.7	692.4	713.8	719.2
40°	5457.0	4131.3	1258.6	821.2	665.5	583.7	585.0	610.5	650.8	683.0	693.7
42.5°	6067.5	4606.3	1357.9	786.3	653.4	564.9	560.9	578.3	605.1	627.9	637.3
45°	6648.5	5094.7	1455.8	738.0	638.7	546.1	536.7	543.4	548.8	558.2	563.5
47.5°	7155.7	5438.2	1427.6	693.7	618.6	524.6	508.5	505.8	489.7	488.4	487.1
50°	7505.9	5513.3	1268.0	649.4	589.0	500.5	475.0	458.9	430.7	417.3	418.6
52.5°	7617.2	5216.8	1035.8	605.1	540.7	468.3	432.1	406.6	371.7	359.6	358.3
55°	7469.6	4635.8	827.9	551.5	473.6	425.3	385.1	351.5	323.4	308.6	308.6
57.5°	7108.7	3896.5	654.8	488.4	402.5	377.0	336.8	303.2	279.1	264.3	261.6
60°	6510.3	3094.1	517.9	413.3	343.5	324.7	283.1	261.6	240.2	222.7	218.7
62.5°	5601.9	2208.6	406.6	327.4	287.1	265.7	241.5	225.4	199.9	175.8	171.7
65°	4371.5	1351.2	314.0	240.2	230.8	220.1	205.3	190.5	159.7	135.5	131.5
67.5°	2757.3	640.0	224.1	181.1	182.5	177.1	170.4	158.3	135.5	114.1	111.4
70°	1214.3	309.9	147.6	138.2	135.5	135.5	140.9	136.9	115.4	95.3	91.2
72.5°	413.3	166.4	110.0	104.7	97.9	96.6	118.1	114.1	92.6	73.8	69.8
75°	216.0	111.4	80.5	75.1	59.0	71.1	93.9	88.6	65.7	48.3	44.3
77.5°	140.9	79.2	55.0	48.3	33.5	47.0	69.8	61.7	38.9	24.2	21.5
80°	88.6	52.3	32.2	22.8	16.1	25.5	37.6	26.8	14.8	5.4	4.0
82.5°	47.0	26.8	12.1	8.1	6.7	8.1	9.4	6.7	2.7	0.0	0.0
85°	18.8	9.4	4.0	2.7	1.3	0.0	2.7	1.3	0.0	0.0	0.0
87.5°	6.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)