

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: P883099

Luminaire Tested: **NAV-SB3B-740-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883099  
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-SB3B-740-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18222 lumens  
Efficiency: N/A  
Efficacy: 166.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3

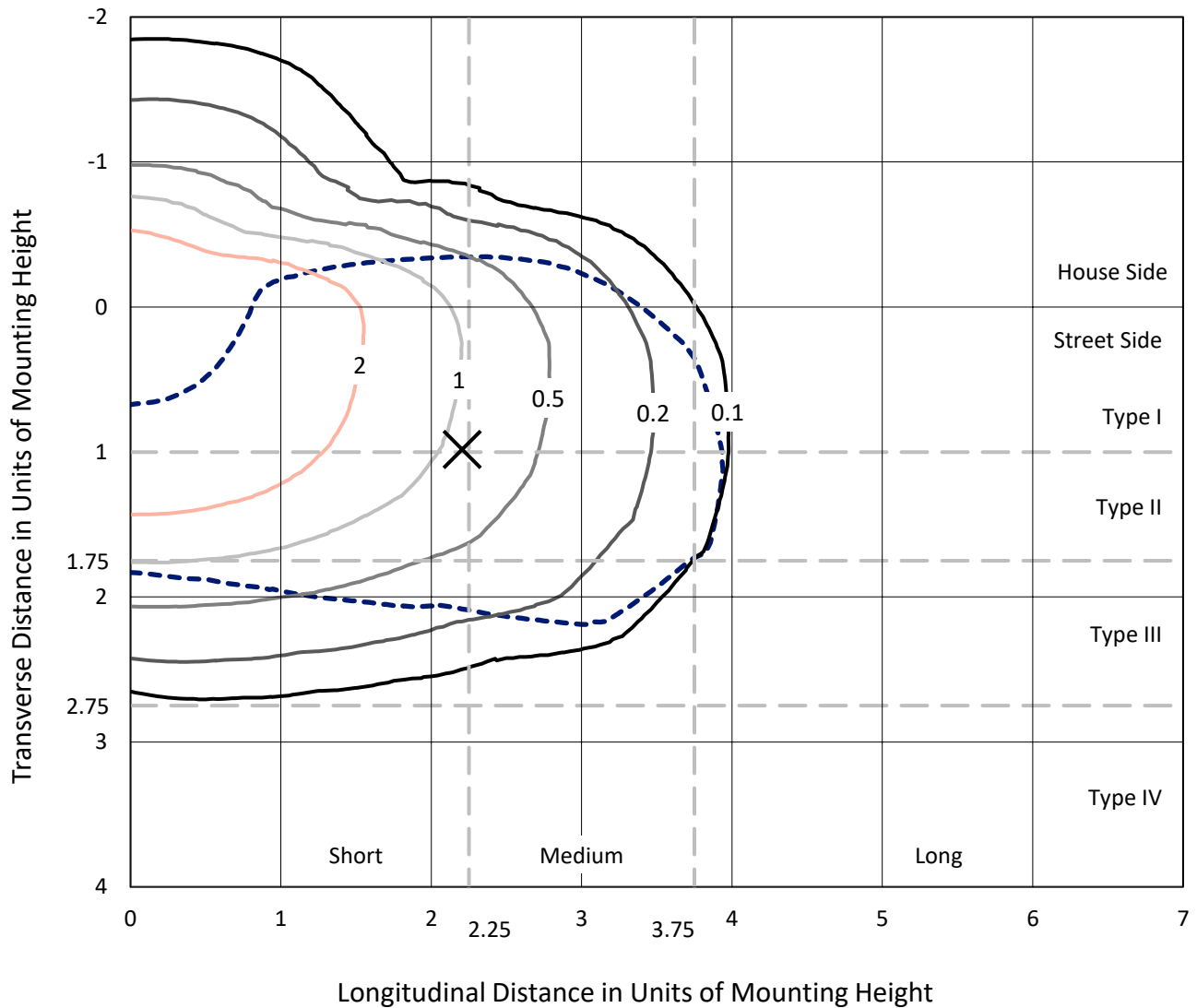
Input Watts (W): 109.2  
Input Voltage (V): 120.0  
Input Current (Ain): 0.919  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

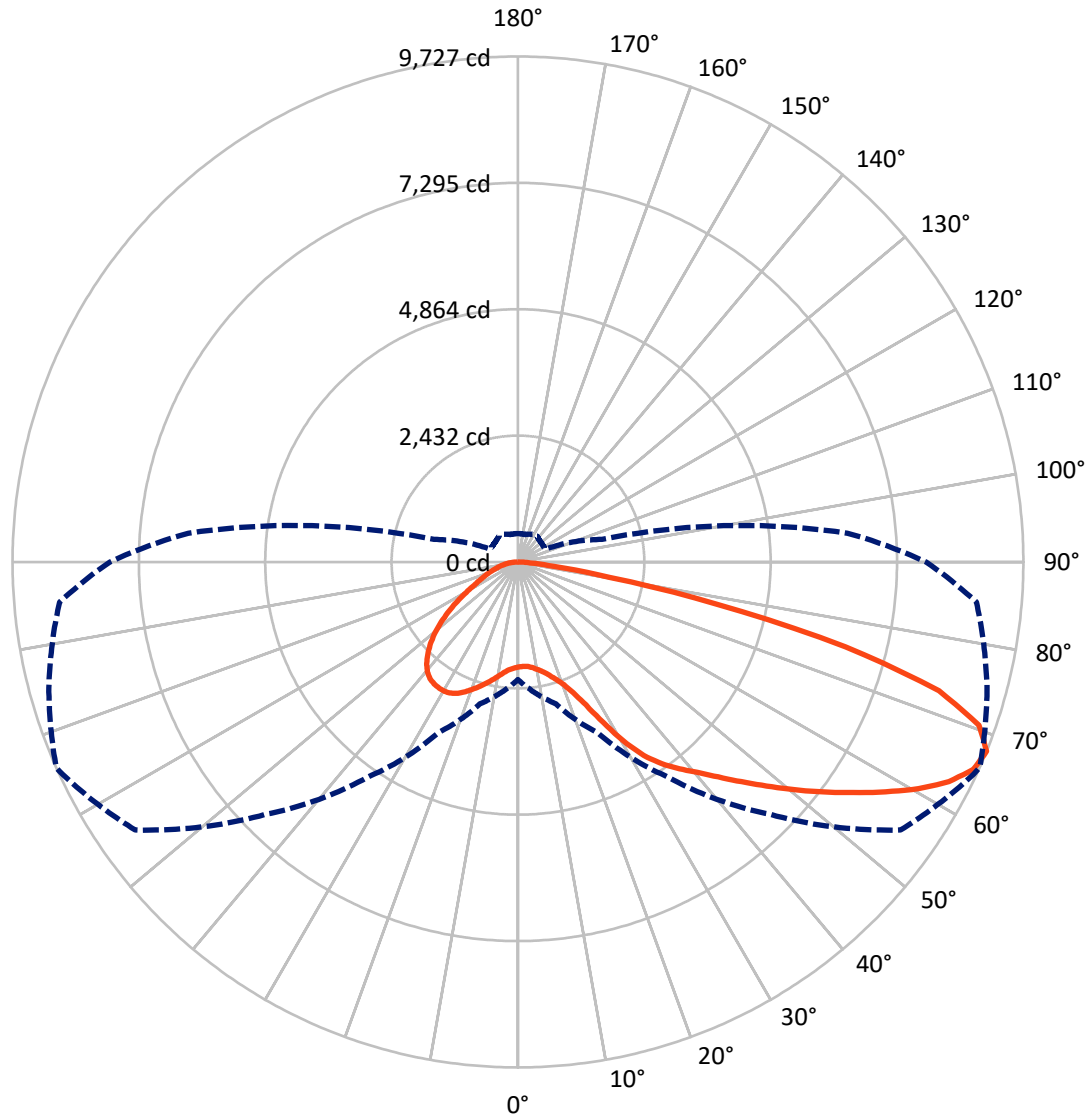
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 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
<b>House Side</b>	Lumens	4530.9	0.0	4530.9
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	13691.1	0.0	13691.1
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	18222.0	0.0	18222.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.4	1.1
10°-20°	662.0	3.6
20°-30°	1276.0	7.0
30°-40°	2237.4	12.3
40°-50°	3326.2	18.3
50°-60°	4216.3	23.1
60°-70°	4125.5	22.6
70°-80°	1967.9	10.8
80°-90°	210.3	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°	18222.0	100.0
0°-180°	18222.0	100.0

**Coefficient of Utilization**



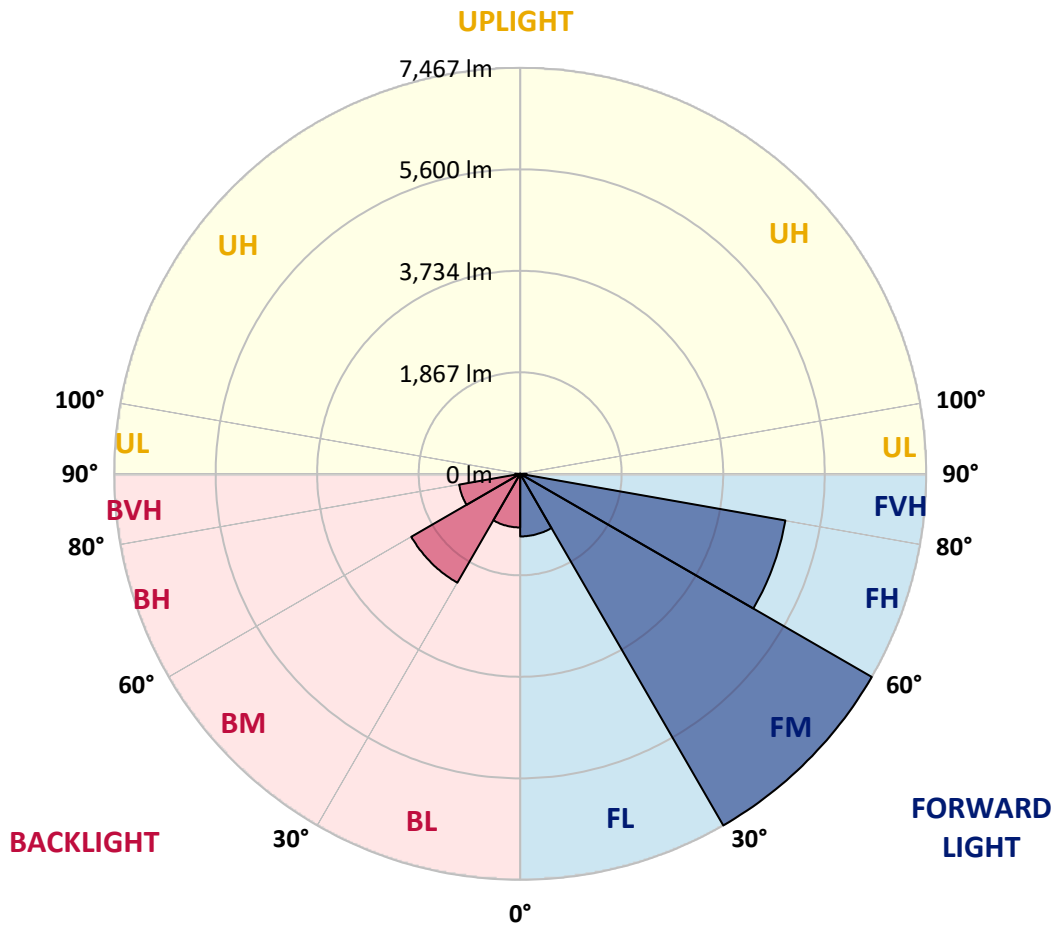
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1151.4	6.3			
FM (30°-60°)	7467.2	41.0			
FH (60°-80°)	4953.2	27.2			G2/5000
FVH (80°-90°)	119.2	0.7			G2/225
BL (0°-30°)	987.0	5.4	B2/1000		
BM (30°-60°)	2312.6	12.7	B2/2500		
BH (60°-80°)	1140.2	6.3	B3/2500		G3/2500
BVH (80°-90°)	91.1	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°	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1
2.5°	2000.0	2011.5	2008.6	2003.8	2002.9	2004.8	2007.7	2010.5	2009.6	2014.4	2022.0
5°	1994.3	2005.7	2004.8	2004.8	2008.6	2016.3	2021.1	2025.8	2021.1	2026.8	2037.3
7.5°	1998.1	2006.7	2010.5	2014.4	2023.9	2038.3	2049.8	2060.3	2054.6	2061.3	2074.7
10°	2046.9	2053.6	2057.4	2057.4	2064.1	2080.4	2091.9	2111.1	2106.3	2116.8	2134.0
12.5°	2135.9	2142.6	2142.6	2138.8	2143.6	2154.1	2158.0	2179.0	2170.4	2187.6	2204.9
15°	2245.1	2258.5	2248.0	2241.3	2243.2	2253.7	2252.8	2269.0	2260.4	2274.8	2290.1
17.5°	2365.7	2383.0	2365.7	2364.8	2360.9	2372.4	2373.4	2387.7	2372.4	2383.0	2393.5
20°	2508.4	2532.3	2517.9	2522.7	2514.1	2518.9	2523.7	2544.8	2520.8	2528.5	2525.6
22.5°	2709.4	2738.1	2722.8	2741.0	2735.3	2731.4	2730.5	2767.8	2730.5	2733.4	2705.6
25°	3002.4	3036.9	3010.0	3034.9	3034.9	3047.4	3061.7	3109.6	3047.4	3029.2	2957.4
27.5°	3435.1	3469.6	3416.9	3432.3	3427.5	3458.1	3442.8	3561.5	3494.5	3464.8	3320.2
30°	3956.0	4017.2	3917.7	3913.8	3909.0	3957.9	3979.9	4058.4	3990.4	3960.7	3786.5
32.5°	4518.9	4583.0	4464.3	4429.9	4411.7	4441.4	4423.2	4486.4	4439.4	4393.5	4178.1
35°	5114.4	5177.6	5064.6	4997.6	4924.8	4862.6	4797.5	4813.8	4769.7	4699.9	4476.8
37.5°	5677.4	5793.2	5673.5	5601.7	5467.7	5346.1	5164.2	5088.6	5047.4	4983.2	4758.3
40°	6250.8	6316.9	6225.9	6164.7	6019.1	5828.6	5537.6	5377.7	5322.2	5259.9	5069.4
42.5°	6673.0	6736.2	6687.4	6645.3	6531.3	6310.2	5933.9	5733.8	5653.4	5583.5	5421.7
45°	7008.1	7055.0	7024.4	7039.7	6990.9	6776.4	6344.7	6115.8	6032.5	5947.3	5820.0
47.5°	7143.1	7192.9	7241.7	7332.7	7416.0	7258.0	6786.0	6529.4	6441.4	6354.2	6228.8
50°	7127.8	7178.5	7320.2	7513.6	7772.1	7719.5	7251.3	6969.8	6888.5	6788.9	6673.0
52.5°	7005.3	7062.7	7244.6	7566.3	7978.0	8065.1	7725.2	7424.6	7348.0	7229.3	7113.4
55°	6683.6	6718.0	6990.9	7446.6	8026.8	8306.4	8189.6	7909.0	7832.4	7666.8	7540.4
57.5°	6087.1	6136.9	6534.2	7124.0	7904.3	8470.1	8597.4	8418.4	8344.7	8106.3	7974.1
60°	5308.8	5388.2	5843.0	6582.1	7592.1	8469.1	8967.9	8919.1	8857.8	8539.0	8401.1
62.5°	4428.0	4519.9	4957.4	5816.2	7046.4	8228.8	9199.6	9338.4	9306.8	8938.2	8762.1
65°	3400.7	3463.9	3899.5	4825.3	6197.2	7712.8	9226.4	9624.7	9630.4	9241.7	8950.7
67.5°	2264.2	2446.1	2824.3	3620.9	5059.8	6869.3	8990.9	9671.6	9727.1	9346.1	8855.9
70°	1104.8	1344.2	1714.7	2353.3	3620.9	5575.9	8375.3	9286.7	9410.2	9041.6	8291.0
72.5°	458.6	536.1	738.2	1161.3	2078.5	3762.6	7138.3	8243.2	8472.0	8011.5	6970.8
75°	309.2	335.1	422.2	595.5	946.9	1855.4	5147.9	6146.5	6515.1	6050.7	4945.9
77.5°	238.4	254.7	307.3	416.5	562.9	701.8	2755.4	3704.2	3894.7	3605.5	2573.5
80°	187.6	200.1	229.8	303.5	399.2	375.3	939.2	1678.3	1788.4	1500.2	827.2
82.5°	162.8	167.5	164.7	205.8	265.2	219.2	308.3	619.4	683.6	495.9	270.0
85°	117.8	131.2	136.9	127.3	140.7	111.1	126.4	219.2	241.3	215.4	152.2
87.5°	47.9	70.8	87.1	82.3	51.7	31.6	39.3	64.1	73.7	80.4	49.8
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°	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1	2021.1
2.5°	2023.0	2029.7	2034.5	2040.2	2044.0	2049.8	2061.3	2068.0	2068.9	2073.7	2072.8
5°	2041.2	2050.7	2061.3	2076.6	2093.8	2108.2	2130.2	2145.5	2151.3	2156.1	2155.1
7.5°	2080.4	2093.8	2113.0	2139.8	2164.7	2183.8	2210.6	2228.8	2247.0	2253.7	2254.7
10°	2138.8	2158.0	2185.7	2222.1	2248.9	2273.8	2301.6	2316.9	2335.1	2342.7	2346.6
12.5°	2211.6	2231.7	2268.1	2318.8	2343.7	2360.9	2370.5	2366.7	2370.5	2377.2	2379.1
15°	2294.9	2316.9	2358.1	2412.6	2429.9	2414.5	2393.5	2374.3	2371.5	2373.4	2380.1
17.5°	2393.5	2409.8	2457.6	2503.6	2491.1	2428.0	2382.0	2351.4	2336.0	2331.3	2338.0
20°	2531.4	2531.4	2570.6	2599.3	2516.0	2408.8	2337.0	2287.2	2255.6	2242.2	2239.3
22.5°	2698.9	2683.6	2708.5	2688.4	2511.2	2355.2	2255.6	2169.5	2121.6	2102.4	2099.6
25°	2911.4	2893.2	2886.5	2762.1	2476.8	2270.0	2108.2	2003.8	1961.7	1951.2	1953.1
27.5°	3232.2	3186.2	3099.1	2802.3	2413.6	2135.9	1935.9	1839.2	1815.2	1816.2	1819.1
30°	3659.2	3567.3	3353.8	2809.0	2310.2	1946.4	1759.7	1690.8	1679.3	1684.1	1700.3
32.5°	4054.6	3967.4	3614.2	2778.4	2151.3	1760.6	1601.7	1555.8	1538.5	1544.3	1551.9
35°	4364.8	4340.8	3855.4	2735.3	1956.0	1586.4	1460.0	1420.8	1387.3	1379.6	1385.4
37.5°	4657.7	4648.2	4036.4	2675.0	1762.6	1462.9	1346.1	1294.4	1245.6	1218.8	1219.7
40°	4979.4	4969.8	4155.1	2582.1	1591.2	1355.7	1243.7	1175.7	1115.4	1066.5	1071.3
42.5°	5341.3	5284.8	4211.6	2449.0	1445.7	1264.7	1160.4	1068.5	989.0	944.0	946.9
45°	5736.7	5609.4	4210.6	2279.6	1323.1	1181.4	1071.3	941.1	867.4	825.3	823.4
47.5°	6156.0	5919.6	4158.9	2091.9	1204.4	1089.5	933.5	833.9	785.1	759.2	753.5
50°	6588.8	6209.7	4070.8	1876.5	1082.8	985.2	847.3	779.3	742.0	718.0	709.4
52.5°	6995.7	6472.9	3964.6	1632.4	959.3	883.7	809.0	756.3	717.1	690.3	678.8
55°	7373.9	6699.8	3814.3	1382.5	858.8	815.7	790.8	746.8	701.8	670.2	657.7
57.5°	7709.9	6847.3	3554.8	1147.9	787.0	768.8	771.7	730.5	678.8	652.0	634.8
60°	7989.5	6955.5	3170.9	930.6	728.6	722.8	742.0	699.9	639.5	608.9	595.5
62.5°	8157.0	6953.6	2699.9	762.1	678.8	680.7	702.7	661.6	600.3	571.6	562.9
65°	8142.6	6783.1	2182.9	652.0	630.9	632.8	661.6	619.4	567.7	550.5	549.5
67.5°	7854.5	6367.6	1674.5	580.2	578.3	586.9	620.4	590.7	547.6	545.7	548.6
70°	7074.2	5505.0	1206.3	522.7	523.7	536.1	580.2	572.5	537.1	540.9	540.0
72.5°	5672.6	4197.2	810.0	462.4	463.4	483.5	541.9	558.2	526.6	577.3	585.0
75°	3777.9	2617.5	520.8	398.3	399.2	425.1	508.4	530.4	497.8	575.4	580.2
77.5°	1815.2	1176.6	377.2	335.1	335.1	359.0	439.4	474.9	424.1	447.1	409.8
80°	627.1	442.3	296.8	270.0	264.2	280.5	370.5	411.7	365.7	337.0	315.9
82.5°	247.0	229.8	238.4	209.7	190.5	201.1	288.2	339.9	269.0	243.2	242.2
85°	141.7	149.4	168.5	138.8	110.1	123.5	211.6	244.1	203.0	179.0	182.9
87.5°	38.3	52.7	77.5	71.8	49.8	52.7	100.5	135.0	116.8	90.0	92.9
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)