

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: P883398

Luminaire Tested: **NAV-SB3D-722-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883398  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3D-722-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

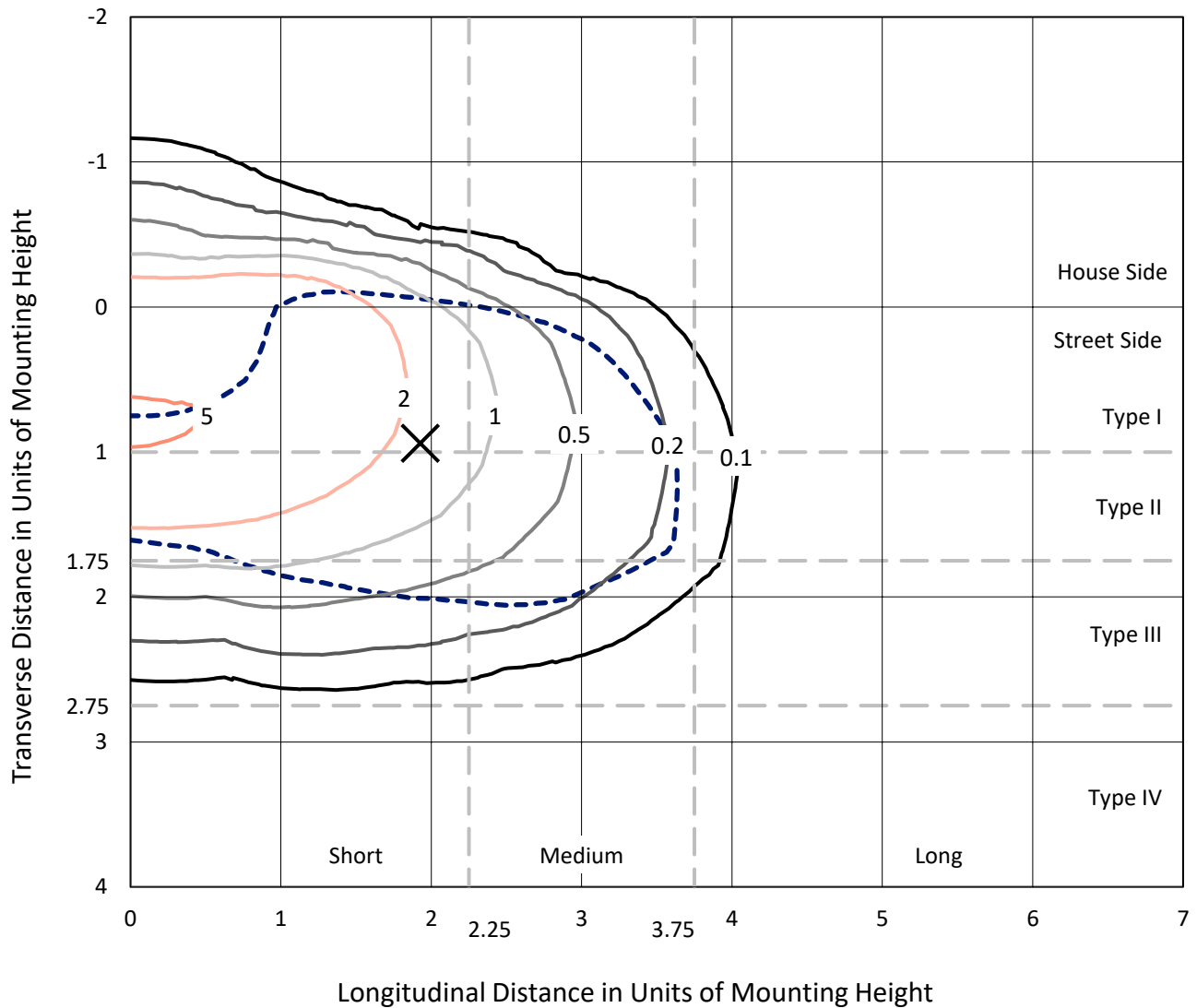
Lumens per Lamp: N/A  
Luminaire Lumens: 19076 lumens  
Efficiency: N/A  
Efficacy: 87.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.84  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 2.542  
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

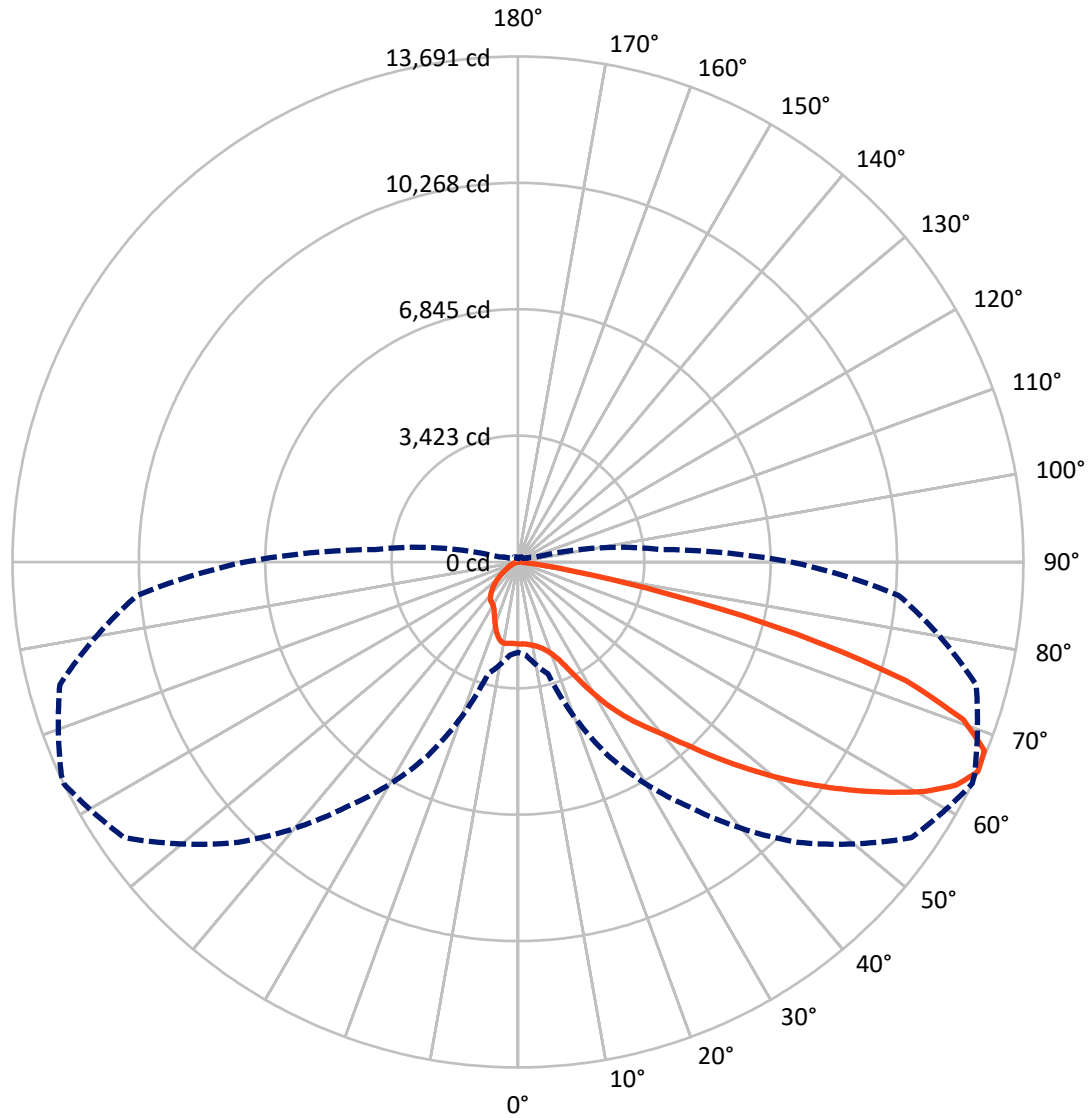
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2551.0	0.0	2551.0
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	16525.0	0.0	16525.0
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	19076.0	0.0	19076.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.7	1.1
10°-20°	555.2	2.9
20°-30°	1052.1	5.5
30°-40°	2128.9	11.2
40°-50°	3626.6	19.0
50°-60°	4931.9	25.9
60°-70°	4631.3	24.3
70°-80°	1855.5	9.7
80°-90°	89.9	0.5
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°	19076.0	100.0
0°-180°	19076.0	100.0

**Coefficient of Utilization**



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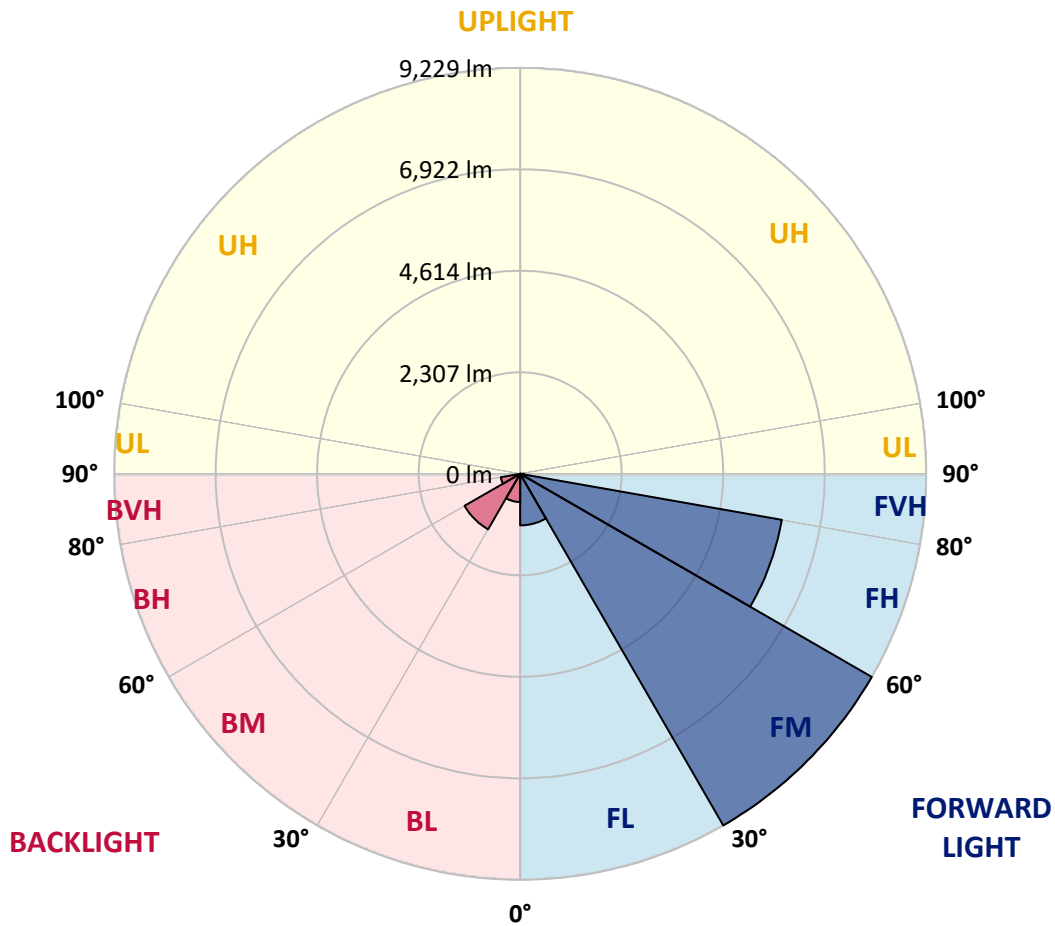
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1171.5	6.1			
FM (30°-60°)	9228.9	48.4			
FH (60°-80°)	6039.0	31.7			G3/7500
FVH (80°-90°)	85.5	0.4			G1/100
BL (0°-30°)	640.5	3.4	B2/1000		
BM (30°-60°)	1458.4	7.6	B2/2500		
BH (60°-80°)	447.8	2.3	B1/500		G1/500
BVH (80°-90°)	4.4	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-G3**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7
2.5°	2211.1	2226.4	2222.6	2218.7	2217.5	2220.0	2221.3	2220.0	2220.0	2220.0	2221.3
5°	2168.9	2181.7	2181.7	2190.6	2203.4	2218.7	2230.2	2232.8	2235.4	2239.2	2237.9
7.5°	2088.3	2098.5	2106.2	2135.6	2167.6	2208.5	2243.0	2260.9	2263.5	2277.6	2282.7
10°	2033.3	2046.1	2058.9	2089.6	2135.6	2197.0	2255.8	2299.3	2305.7	2338.9	2354.3
12.5°	2030.8	2043.5	2060.2	2093.4	2147.1	2212.3	2284.0	2346.6	2358.1	2406.7	2438.7
15°	2057.6	2073.0	2088.3	2129.2	2186.8	2266.1	2342.8	2420.8	2432.3	2501.4	2535.9
17.5°	2112.6	2133.1	2144.6	2185.5	2246.9	2335.1	2436.1	2525.7	2535.9	2616.4	2659.9
20°	2221.3	2245.6	2249.4	2282.7	2342.8	2437.4	2557.6	2668.9	2681.7	2773.7	2822.3
22.5°	2446.4	2480.9	2450.2	2466.8	2520.5	2615.2	2745.6	2886.3	2904.2	3009.0	3052.5
25°	2842.8	2891.4	2812.1	2784.0	2807.0	2905.5	3069.1	3246.9	3267.4	3351.8	3373.5
27.5°	3621.6	3558.9	3438.7	3321.1	3252.0	3308.3	3492.4	3712.4	3738.0	3819.8	3794.2
30°	4477.1	4422.1	4259.7	3998.8	3835.2	3826.2	3996.3	4241.8	4271.2	4349.2	4271.2
32.5°	5333.9	5281.5	5105.0	4784.0	4500.1	4359.5	4477.1	4749.5	4764.8	4814.7	4699.6
35°	6176.7	6122.9	5946.5	5617.8	5268.7	4949.0	4926.0	5232.9	5238.0	5290.4	5119.1
37.5°	7024.5	6979.7	6791.8	6469.5	6125.5	5684.3	5470.8	5690.7	5697.1	5748.3	5570.5
40°	7629.4	7648.6	7519.4	7270.0	6974.6	6492.5	6082.0	6177.9	6139.6	6225.3	6119.1
42.5°	8148.6	8186.9	8074.4	7949.1	7777.7	7353.2	6839.1	6822.5	6761.1	6807.1	6697.1
45°	8597.4	8629.4	8528.4	8499.0	8495.1	8197.2	7666.5	7566.7	7481.0	7472.1	7340.4
47.5°	8762.4	8823.8	8867.3	8965.7	9157.6	9032.2	8522.0	8367.3	8271.3	8201.0	7992.6
50°	8825.1	8890.3	9038.6	9325.1	9779.1	9832.8	9373.7	9199.8	9082.1	8954.2	8647.3
52.5°	8740.7	8857.0	9056.5	9538.7	10197.2	10474.7	10190.8	10038.7	9904.4	9695.9	9240.7
55°	8243.2	8359.6	8767.5	9536.1	10405.7	10924.9	10963.2	10895.5	10744.6	10415.9	9720.2
57.5°	7194.6	7367.2	8013.0	9211.3	10401.8	11312.4	11720.3	11768.9	11600.1	11129.5	10097.5
60°	5741.9	5975.9	6763.6	8491.3	10080.9	11522.1	12384.0	12627.0	12447.9	11832.8	10403.1
62.5°	4006.5	4277.6	5023.2	7363.4	9346.8	11371.2	12868.7	13317.5	13182.0	12462.0	10520.8
65°	2443.8	2530.8	3131.8	5794.3	8098.7	10739.5	13018.3	13690.9	13646.2	12846.9	10346.9
67.5°	1627.9	1700.8	1873.5	3973.3	6286.6	9477.3	12660.2	13625.7	13638.5	12784.3	9710.0
70°	980.8	1043.5	1156.0	2310.8	4074.3	7501.5	11551.5	12794.5	12868.7	11946.7	8502.8
72.5°	404.1	446.3	548.6	1047.3	2110.0	4761.0	9198.5	10985.0	11157.6	10045.1	6525.8
75°	228.9	250.6	322.3	525.6	915.6	2218.7	5571.8	7798.2	8052.7	6923.5	3925.9
77.5°	152.2	162.4	208.4	340.2	515.4	757.1	2381.1	4062.8	4548.7	3781.4	1699.5
80°	102.3	111.3	143.2	227.6	335.0	324.8	758.3	1505.2	1851.7	1299.3	414.3
82.5°	69.1	70.3	102.3	149.6	212.3	157.3	223.8	468.0	588.3	376.0	157.3
85°	39.6	38.4	75.4	87.0	94.6	65.2	67.8	140.7	184.1	158.6	89.5
87.5°	5.1	7.7	29.4	23.0	12.8	14.1	14.1	24.3	35.8	38.4	19.2
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°	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7	2218.7
2.5°	2221.3	2220.0	2216.2	2212.3	2203.4	2198.3	2200.8	2198.3	2197.0	2198.3	2203.4
5°	2237.9	2234.1	2223.9	2211.1	2193.2	2171.4	2157.4	2136.9	2117.7	2106.2	2108.8
7.5°	2282.7	2278.8	2264.8	2229.0	2171.4	2080.6	1997.5	1924.6	1869.6	1837.7	1838.9
10°	2354.3	2347.9	2326.2	2246.9	2096.0	1897.8	1732.8	1596.0	1506.4	1464.2	1460.4
12.5°	2438.7	2431.0	2392.7	2230.2	1952.7	1643.3	1415.6	1263.5	1180.3	1143.3	1139.4
15°	2538.4	2528.2	2452.8	2151.0	1744.3	1361.9	1153.5	1039.7	986.0	952.7	954.0
17.5°	2662.5	2644.6	2497.5	2032.0	1517.9	1147.1	992.4	906.7	859.4	827.4	824.8
20°	2823.6	2794.2	2533.3	1890.1	1309.5	1011.5	883.7	812.0	776.2	748.1	743.0
22.5°	3048.7	3006.5	2576.8	1736.6	1162.4	918.2	803.1	750.7	721.2	689.3	684.2
25°	3327.5	3277.6	2630.5	1594.7	1061.4	837.6	744.3	700.8	666.3	629.2	625.3
27.5°	3717.5	3628.0	2694.5	1478.3	974.5	768.6	690.6	642.0	602.3	571.6	565.2
30°	4152.3	4005.2	2750.7	1408.0	895.2	704.6	620.2	571.6	534.5	512.8	509.0
32.5°	4564.1	4364.6	2787.8	1377.3	823.6	631.7	543.5	491.1	462.9	456.5	460.4
35°	4952.8	4689.4	2784.0	1347.9	759.6	558.8	468.0	414.3	392.6	396.4	396.4
37.5°	5400.4	5036.0	2757.1	1301.8	707.2	492.3	402.8	355.5	336.3	337.6	342.7
40°	5920.9	5436.2	2740.5	1214.9	649.6	431.0	349.1	310.8	296.7	291.6	290.3
42.5°	6475.9	5823.7	2743.0	1116.4	578.0	376.0	312.0	280.1	267.3	263.4	262.2
45°	7033.5	6193.3	2746.9	1014.1	502.6	333.8	285.2	258.3	250.6	245.5	245.5
47.5°	7557.8	6507.9	2675.3	904.1	428.4	301.8	263.4	245.5	239.1	232.7	232.7
50°	8046.3	6717.6	2502.6	776.2	369.6	276.2	246.8	234.0	227.6	221.2	221.2
52.5°	8426.1	6750.8	2217.5	644.5	328.7	257.0	236.6	225.1	217.4	211.0	209.7
55°	8594.9	6542.4	1812.1	521.8	296.7	240.4	226.3	214.8	205.9	199.5	198.2
57.5°	8551.4	6103.8	1413.1	419.4	266.0	223.8	213.6	205.9	195.7	185.4	184.1
60°	8337.8	5516.8	1065.2	349.1	237.9	205.9	199.5	193.1	179.0	163.7	161.1
62.5°	7968.3	4778.9	759.6	289.0	207.2	185.4	182.9	177.8	157.3	129.2	126.6
65°	7403.0	3882.5	511.5	240.4	177.8	162.4	163.7	154.7	127.9	95.9	93.4
67.5°	6576.9	2839.0	327.4	196.9	148.3	135.6	136.8	131.7	108.7	81.8	78.0
70°	5524.5	1879.9	213.6	149.6	118.9	104.9	112.5	113.8	92.1	66.5	63.9
72.5°	4050.0	1110.0	149.6	111.3	87.0	72.9	92.1	94.6	74.2	49.9	47.3
75°	2308.3	526.9	112.5	80.6	53.7	51.2	71.6	71.6	51.2	33.2	30.7
77.5°	969.3	220.0	79.3	52.4	30.7	29.4	48.6	44.8	25.6	15.3	15.3
80°	280.1	98.5	42.2	25.6	12.8	11.5	19.2	14.1	6.4	2.6	2.6
82.5°	110.0	43.5	16.6	10.2	5.1	5.1	2.6	0.0	0.0	0.0	0.0
85°	65.2	17.9	7.7	3.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.6	3.8	2.6	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)