

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: P884438

Luminaire Tested: **NAV-SB5B-730-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884438
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-SB5B-730-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 450mA 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: 22060 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

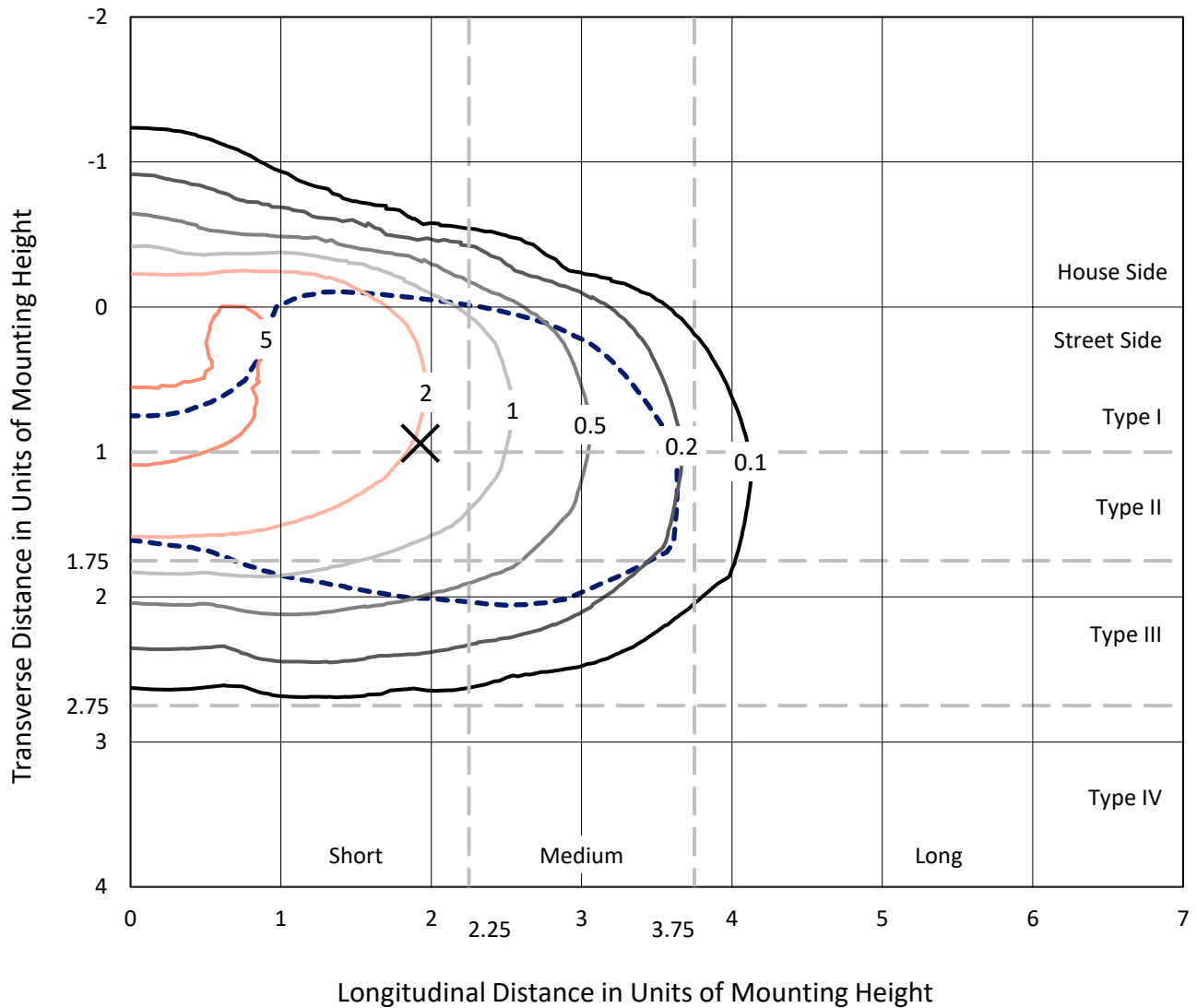
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

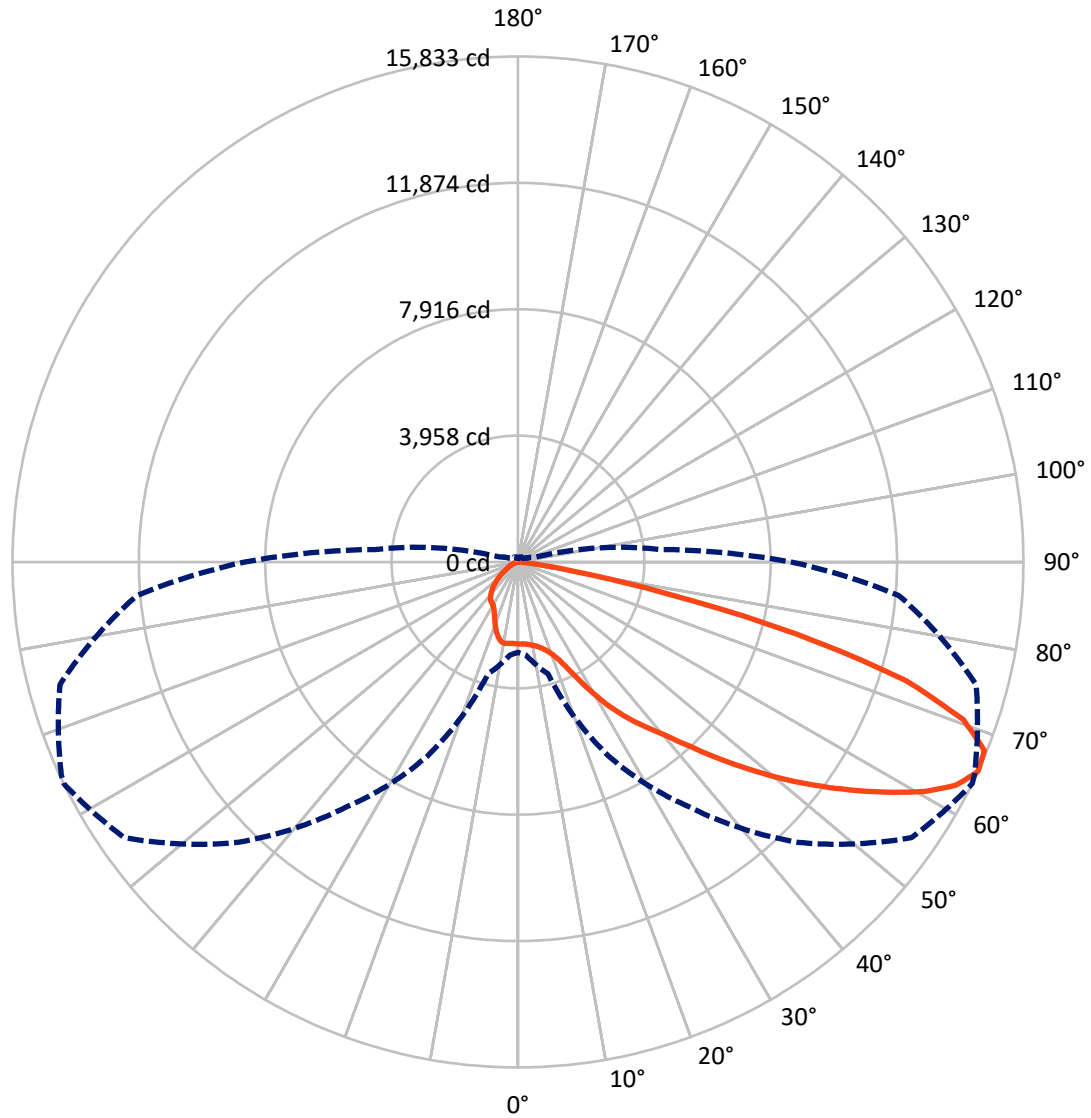
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 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
House Side	Lumens	2950.1	0.0	2950.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	19109.9	0.0	19109.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	22060.0	0.0	22060.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.7	1.1
10°-20°	642.1	2.9
20°-30°	1216.6	5.5
30°-40°	2461.9	11.2
40°-50°	4193.9	19.0
50°-60°	5703.4	25.9
60°-70°	5355.7	24.3
70°-80°	2145.7	9.7
80°-90°	104.0	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°	22060.0	100.0
0°-180°	22060.0	100.0

Coefficient of Utilization



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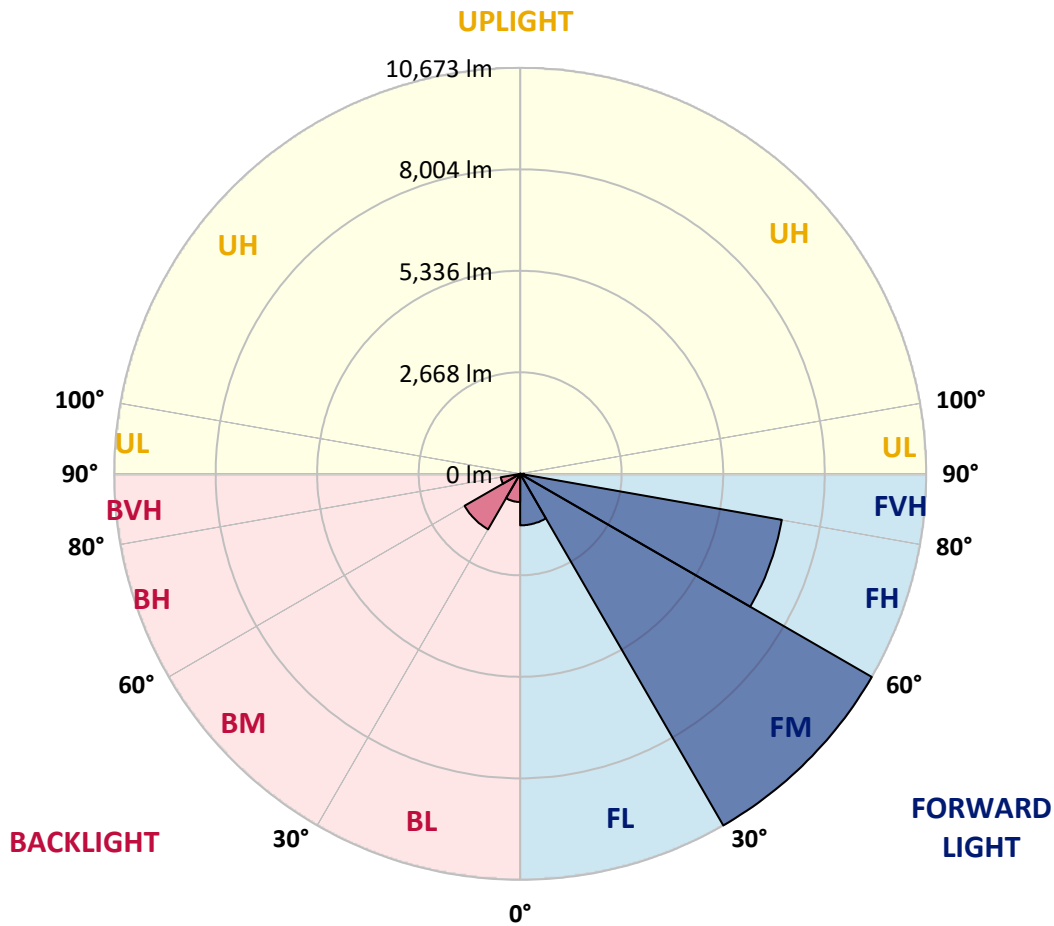
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1354.7	6.1			
FM (30°-60°)	10672.6	48.4			
FH (60°-80°)	6983.7	31.7			G3/7500
FVH (80°-90°)	98.9	0.4			G1/100
BL (0°-30°)	740.7	3.4	B2/1000		
BM (30°-60°)	1686.5	7.6	B2/2500		
BH (60°-80°)	517.8	2.3	B2/1000		G2/1000
BVH (80°-90°)	5.1	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°	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8
2.5°	2556.9	2574.7	2570.2	2565.8	2564.3	2567.3	2568.8	2567.3	2567.3	2567.3	2568.8
5°	2508.1	2522.9	2522.9	2533.3	2548.1	2565.8	2579.1	2582.1	2585.0	2589.5	2588.0
7.5°	2415.0	2426.8	2435.7	2469.7	2506.7	2554.0	2593.9	2614.6	2617.6	2633.8	2639.7
10°	2351.4	2366.2	2381.0	2416.4	2469.7	2540.7	2608.7	2659.0	2666.4	2704.8	2722.6
12.5°	2348.4	2363.2	2382.4	2420.9	2483.0	2558.4	2641.2	2713.7	2727.0	2783.2	2820.2
15°	2379.5	2397.2	2415.0	2462.3	2528.8	2620.5	2709.3	2799.5	2812.8	2892.6	2932.6
17.5°	2443.1	2466.7	2480.0	2527.4	2598.3	2700.4	2817.2	2920.7	2932.6	3025.7	3076.0
20°	2568.8	2596.9	2601.3	2639.7	2709.3	2818.7	2957.7	3086.4	3101.2	3207.6	3263.8
22.5°	2829.0	2869.0	2833.5	2852.7	2914.8	3024.3	3175.1	3337.8	3358.5	3479.7	3530.0
25°	3287.5	3343.7	3252.0	3219.5	3246.1	3360.0	3549.2	3754.8	3778.5	3876.1	3901.2
27.5°	4188.1	4115.6	3976.6	3840.6	3760.7	3825.8	4038.7	4293.1	4322.7	4417.3	4387.8
30°	5177.5	5113.9	4926.1	4624.4	4435.1	4424.7	4621.4	4905.3	4939.4	5029.6	4939.4
32.5°	6168.3	6107.7	5903.6	5532.4	5204.1	5041.4	5177.5	5492.5	5510.2	5567.9	5434.8
35°	7142.9	7080.7	6876.7	6496.6	6092.9	5723.2	5696.5	6051.5	6057.4	6118.0	5919.8
37.5°	8123.3	8071.6	7854.2	7481.5	7083.7	6573.5	6326.5	6580.9	6588.3	6647.4	6441.9
40°	8822.8	8845.0	8695.6	8407.3	8065.7	7508.1	7033.4	7144.3	7100.0	7199.0	7076.3
42.5°	9423.2	9467.6	9337.5	9192.5	8994.4	8503.4	7908.9	7889.7	7818.7	7871.9	7744.7
45°	9942.3	9979.3	9862.5	9828.4	9824.0	9479.4	8865.7	8750.4	8651.3	8640.9	8488.6
47.5°	10133.1	10204.1	10254.4	10368.2	10590.1	10445.1	9855.1	9676.1	9565.2	9483.9	9242.8
50°	10205.6	10281.0	10452.5	10783.8	11308.8	11370.9	10840.0	10638.9	10502.8	10354.9	10000.0
52.5°	10107.9	10242.5	10473.2	11030.8	11792.4	12113.3	11785.0	11609.0	11453.7	11212.7	10686.2
55°	9532.7	9667.3	10139.0	11027.8	12033.4	12633.8	12678.2	12599.8	12425.3	12045.2	11240.7
57.5°	8320.0	8519.7	9266.5	10652.2	12029.0	13081.9	13553.7	13609.9	13414.7	12870.4	11677.0
60°	6640.0	6910.7	7821.6	9819.6	11657.8	13324.5	14321.2	14602.2	14395.1	13683.8	12030.5
62.5°	4633.2	4946.8	5808.9	8515.2	10808.9	13149.9	14881.7	15400.8	15244.0	14411.4	12166.5
65°	2826.1	2926.6	3621.7	6700.7	9365.6	12419.4	15054.7	15832.6	15780.8	14856.5	11965.4
67.5°	1882.6	1966.9	2166.5	4594.8	7270.0	10959.8	14640.6	15757.2	15771.9	14784.1	11228.9
70°	1134.3	1206.7	1336.9	2672.3	4711.6	8674.9	13358.5	14795.9	14881.7	13815.4	9832.9
72.5°	467.3	516.1	634.4	1211.2	2440.1	5505.8	10637.4	12703.3	12903.0	11616.4	7546.6
75°	264.7	289.9	372.7	607.8	1058.9	2565.8	6443.4	9018.0	9312.3	8006.5	4540.1
77.5°	176.0	187.8	241.1	393.4	596.0	875.5	2753.6	4698.3	5260.3	4373.0	1965.4
80°	118.3	128.7	165.6	263.2	387.5	375.6	877.0	1740.6	2141.4	1502.5	479.1
82.5°	79.9	81.3	118.3	173.0	245.5	181.9	258.8	541.3	680.3	434.8	181.9
85°	45.8	44.4	87.3	100.6	109.4	75.4	78.4	162.7	213.0	183.4	103.5
87.5°	5.9	8.9	34.0	26.6	14.8	16.3	16.3	28.1	41.4	44.4	22.2
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°	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8	2565.8
2.5°	2568.8	2567.3	2562.8	2558.4	2548.1	2542.1	2545.1	2542.1	2540.7	2542.1	2548.1
5°	2588.0	2583.6	2571.7	2556.9	2536.2	2511.1	2494.8	2471.2	2449.0	2435.7	2438.6
7.5°	2639.7	2635.3	2619.0	2577.6	2511.1	2406.1	2310.0	2225.7	2162.1	2125.1	2126.6
10°	2722.6	2715.2	2690.0	2598.3	2423.8	2194.6	2003.8	1845.6	1742.1	1693.3	1688.8
12.5°	2820.2	2811.3	2766.9	2579.1	2258.2	1900.3	1637.1	1461.1	1365.0	1322.1	1317.7
15°	2935.5	2923.7	2836.4	2487.4	2017.2	1575.0	1333.9	1202.3	1140.2	1101.7	1103.2
17.5°	3079.0	3058.3	2888.2	2349.9	1755.4	1326.5	1147.6	1048.5	993.8	956.8	953.9
20°	3265.3	3231.3	2929.6	2185.7	1514.3	1169.8	1021.9	939.1	897.7	865.1	859.2
22.5°	3525.6	3476.8	2979.9	2008.3	1344.3	1061.8	928.7	868.1	834.1	797.1	791.2
25°	3848.0	3790.3	3042.0	1844.1	1227.4	968.6	860.7	810.4	770.5	727.6	723.2
27.5°	4299.0	4195.5	3115.9	1709.6	1126.9	888.8	798.6	742.4	696.5	661.0	653.7
30°	4801.8	4631.8	3181.0	1628.2	1035.2	814.8	717.2	661.0	618.2	593.0	588.6
32.5°	5278.0	5047.3	3223.9	1592.7	952.4	730.6	628.5	567.9	535.3	527.9	532.4
35°	5727.6	5422.9	3219.5	1558.7	878.4	646.3	541.3	479.1	454.0	458.4	458.4
37.5°	6245.2	5823.7	3188.4	1505.5	817.8	569.4	465.8	411.1	388.9	390.4	396.3
40°	6847.1	6286.6	3169.2	1404.9	751.3	498.4	403.7	359.4	343.1	337.2	335.7
42.5°	7488.9	6734.7	3172.1	1291.0	668.4	434.8	360.8	323.9	309.1	304.6	303.2
45°	8133.7	7162.1	3176.6	1172.7	581.2	386.0	329.8	298.7	289.9	283.9	283.9
47.5°	8740.0	7525.9	3093.8	1045.5	495.4	349.0	304.6	283.9	276.5	269.2	269.2
50°	9304.9	7768.4	2894.1	897.7	427.4	319.4	285.4	270.6	263.2	255.8	255.8
52.5°	9744.2	7806.9	2564.3	745.3	380.1	297.2	273.6	260.3	251.4	244.0	242.5
55°	9939.4	7565.8	2095.5	603.4	343.1	278.0	261.8	248.4	238.1	230.7	229.2
57.5°	9889.1	7058.6	1634.1	485.1	307.6	258.8	247.0	238.1	226.3	214.4	213.0
60°	9642.1	6379.8	1231.9	403.7	275.1	238.1	230.7	223.3	207.0	189.3	186.3
62.5°	9214.7	5526.5	878.4	334.2	239.6	214.4	211.5	205.6	181.9	149.4	146.4
65°	8561.1	4489.8	591.5	278.0	205.6	187.8	189.3	178.9	147.9	110.9	108.0
67.5°	7605.7	3283.0	378.6	227.7	171.5	156.8	158.2	152.3	125.7	94.6	90.2
70°	6388.6	2173.9	247.0	173.0	137.5	121.3	130.1	131.6	106.5	76.9	73.9
72.5°	4683.5	1283.6	173.0	128.7	100.6	84.3	106.5	109.4	85.8	57.7	54.7
75°	2669.3	609.3	130.1	93.2	62.1	59.2	82.8	82.8	59.2	38.5	35.5
77.5°	1121.0	254.4	91.7	60.6	35.5	34.0	56.2	51.8	29.6	17.7	17.7
80°	323.9	113.9	48.8	29.6	14.8	13.3	22.2	16.3	7.4	3.0	3.0
82.5°	127.2	50.3	19.2	11.8	5.9	5.9	3.0	0.0	0.0	0.0	0.0
85°	75.4	20.7	8.9	4.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.2	4.4	3.0	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)