

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: P885168

Luminaire Tested: **NAV-SB6B-827-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885168
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-SB6B-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 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: 21779 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

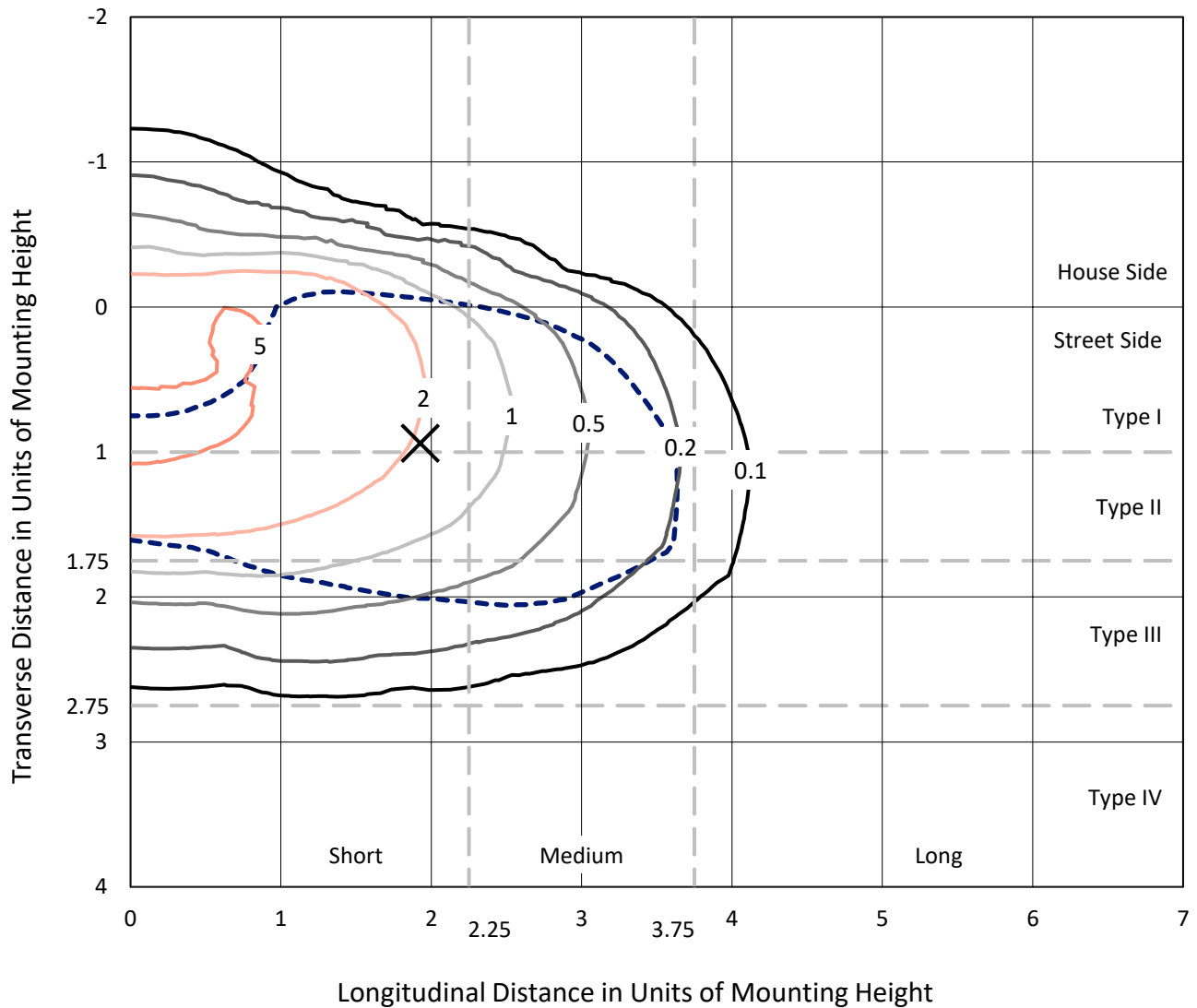
Input Watts (W): 220.4
Input Voltage (V): 120.0
Input Current (Ain): 1.838
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

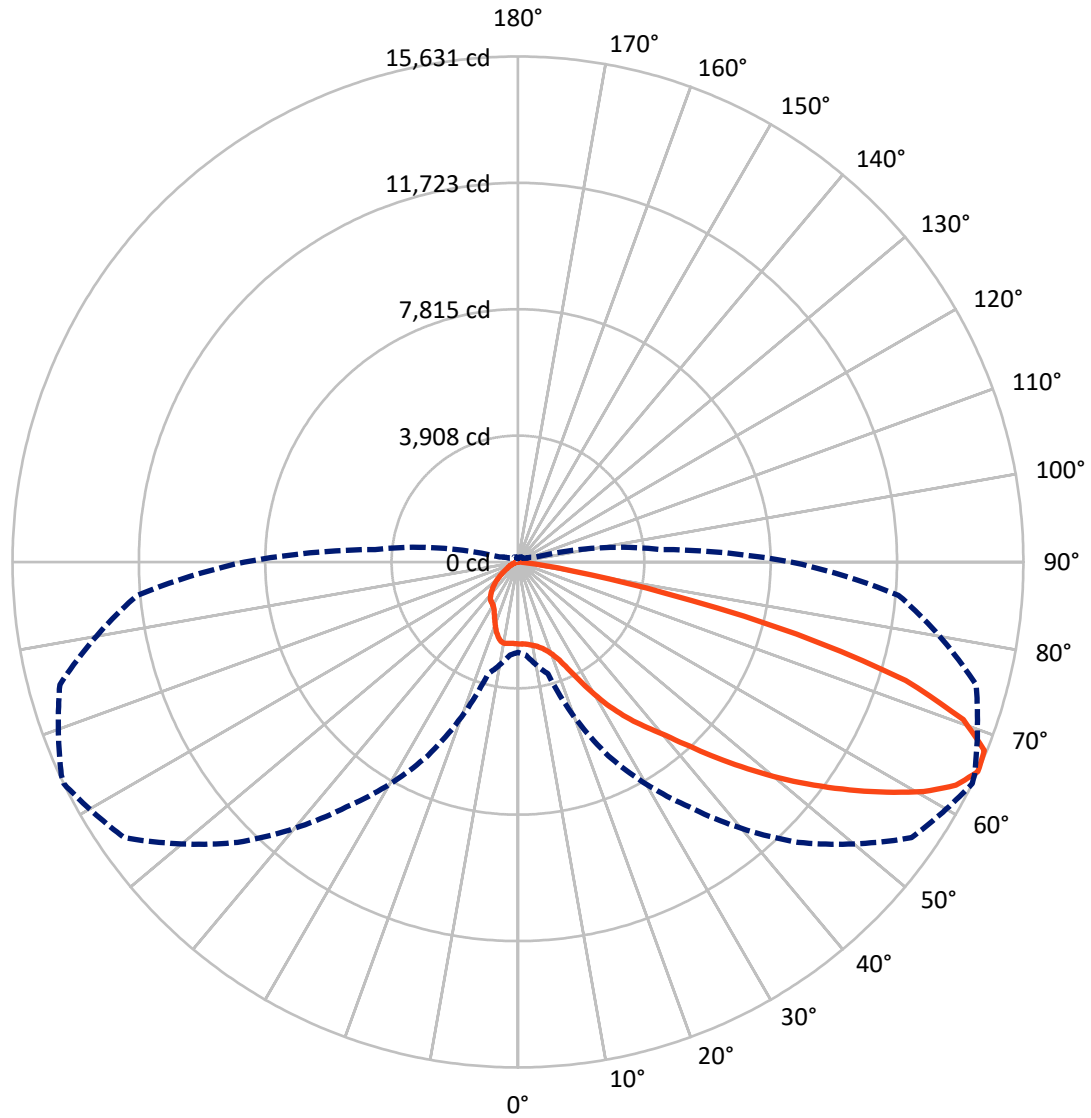
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 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	2912.5	0.0	2912.5
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	18866.5	0.0	18866.5
	% Fixture	86.6	0.0	86.6
Total	Lumens	21779.0	0.0	21779.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.7	1.1
10°-20°	633.9	2.9
20°-30°	1201.1	5.5
30°-40°	2430.5	11.2
40°-50°	4140.5	19.0
50°-60°	5630.7	25.9
60°-70°	5287.5	24.3
70°-80°	2118.4	9.7
80°-90°	102.6	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°	21779.0	100.0
0°-180°	21779.0	100.0

Coefficient of Utilization



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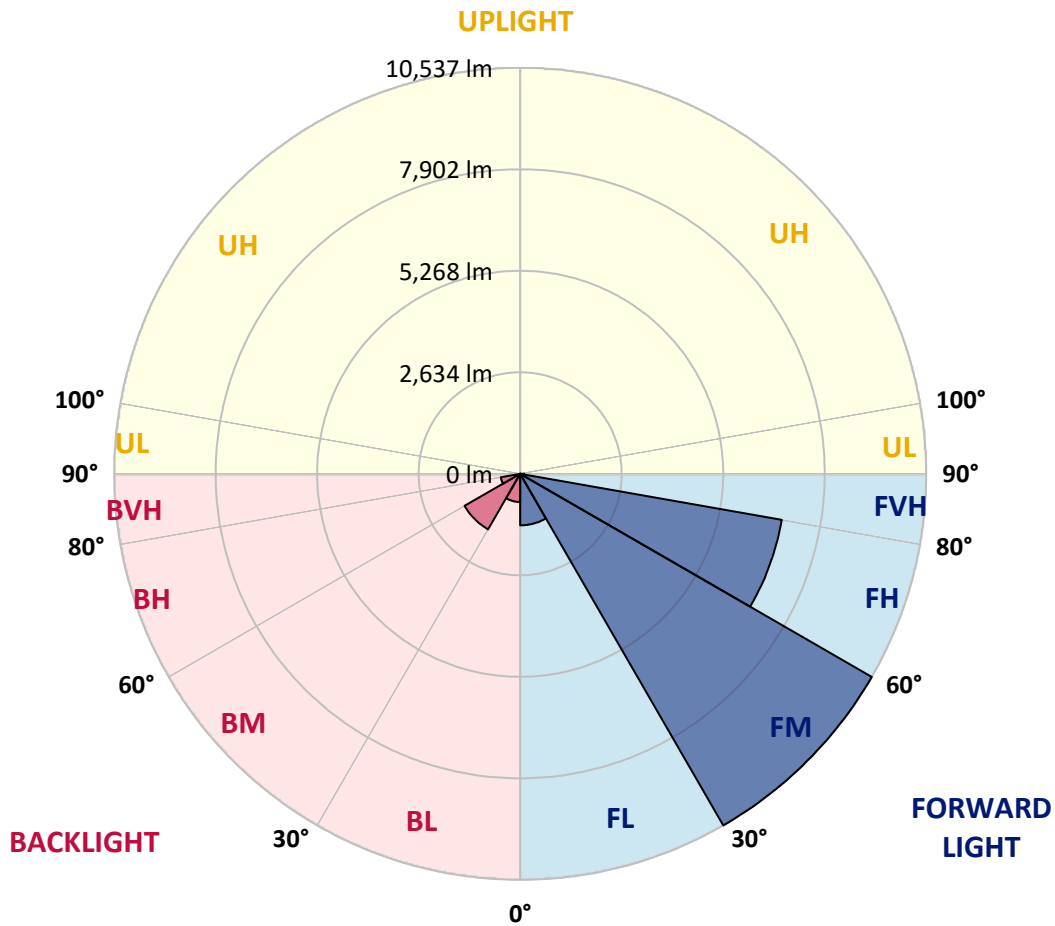
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1337.5	6.1			
FM (30°-60°)	10536.7	48.4			
FH (60°-80°)	6894.7	31.7			G3/7500
FVH (80°-90°)	97.6	0.4			G1/100
BL (0°-30°)	731.2	3.4	B2/1000		
BM (30°-60°)	1665.1	7.6	B2/2500		
BH (60°-80°)	511.2	2.3	B2/1000		G2/1000
BVH (80°-90°)	5.0	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°	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1
2.5°	2524.4	2541.9	2537.5	2533.1	2531.7	2534.6	2536.0	2534.6	2534.6	2534.6	2536.0
5°	2476.2	2490.8	2490.8	2501.0	2515.6	2533.1	2546.3	2549.2	2552.1	2556.5	2555.0
7.5°	2384.2	2395.9	2404.6	2438.2	2474.7	2521.4	2560.9	2581.3	2584.2	2600.3	2606.1
10°	2321.4	2336.0	2350.6	2385.7	2438.2	2508.3	2575.5	2625.1	2632.4	2670.4	2687.9
12.5°	2318.5	2333.1	2352.1	2390.0	2451.4	2525.8	2607.6	2679.1	2692.3	2747.7	2784.2
15°	2349.2	2366.7	2384.2	2430.9	2496.6	2587.1	2674.7	2763.8	2776.9	2855.8	2895.2
17.5°	2411.9	2435.3	2448.4	2495.2	2565.2	2666.0	2781.3	2883.5	2895.2	2987.2	3036.8
20°	2536.0	2563.8	2568.2	2606.1	2674.7	2782.8	2920.0	3047.0	3061.6	3166.8	3222.3
22.5°	2793.0	2832.4	2797.4	2816.4	2877.7	2985.7	3134.6	3295.3	3315.7	3435.4	3485.1
25°	3245.6	3301.1	3210.6	3178.4	3204.7	3317.2	3504.0	3707.0	3730.3	3826.7	3851.5
27.5°	4134.8	4063.2	3926.0	3791.7	3712.8	3777.1	3987.3	4238.4	4267.6	4361.1	4331.9
30°	5111.5	5048.7	4863.3	4565.5	4378.6	4368.4	4562.5	4842.9	4876.4	4965.5	4876.4
32.5°	6089.7	6029.9	5828.4	5461.9	5137.8	4977.2	5111.5	5422.5	5440.0	5497.0	5365.6
35°	7051.9	6990.5	6789.1	6413.8	6015.3	5650.3	5624.0	5974.4	5980.2	6040.1	5844.4
37.5°	8019.9	7968.8	7754.1	7386.2	6993.5	6489.8	6245.9	6497.1	6504.4	6562.8	6359.8
40°	8710.4	8732.3	8584.9	8300.2	7962.9	7412.5	6943.8	7053.3	7009.5	7107.3	6986.2
42.5°	9303.2	9347.0	9218.5	9075.4	8879.8	8395.1	7808.2	7789.2	7719.1	7771.7	7646.1
45°	9815.7	9852.2	9736.8	9703.3	9698.9	9358.7	8752.8	8638.9	8541.1	8530.9	8380.5
47.5°	10004.0	10074.1	10123.7	10236.2	10455.2	10312.1	9729.5	9552.9	9443.4	9363.1	9125.1
50°	10075.6	10150.0	10319.4	10646.4	11164.7	11226.0	10701.9	10503.3	10369.0	10223.0	9872.6
52.5°	9979.2	10112.1	10339.8	10890.2	11642.1	11959.0	11634.8	11461.1	11307.8	11069.8	10550.1
55°	9411.2	9544.1	10009.9	10887.3	11880.1	12472.9	12516.7	12439.3	12267.0	11891.8	11097.6
57.5°	8214.0	8411.1	9148.4	10516.5	11875.8	12915.3	13381.0	13436.5	13243.8	12706.5	11528.3
60°	6555.5	6822.6	7722.0	9694.5	11509.3	13154.7	14138.8	14416.2	14211.8	13509.5	11877.2
62.5°	4574.2	4883.7	5734.9	8406.8	10671.2	12982.4	14692.1	15204.6	15049.8	14227.8	12011.5
65°	2790.1	2889.4	3575.6	6615.3	9246.3	12261.2	14862.9	15630.9	15579.8	14667.3	11813.0
67.5°	1858.6	1941.8	2138.9	4536.3	7177.4	10820.2	14454.1	15556.4	15571.0	14595.8	11085.9
70°	1119.8	1191.4	1319.9	2638.2	4651.6	8564.4	13188.3	14607.4	14692.1	13639.4	9707.6
72.5°	461.4	509.5	626.3	1195.8	2409.0	5435.6	10501.9	12541.5	12738.6	11468.4	7450.5
75°	261.3	286.2	367.9	600.1	1045.4	2533.1	6361.3	8903.2	9193.7	7904.5	4482.2
77.5°	173.7	185.4	238.0	388.4	588.4	864.3	2718.5	4638.5	5193.3	4317.3	1940.4
80°	116.8	127.0	163.5	259.9	382.5	370.8	865.8	1718.4	2114.1	1483.4	473.0
82.5°	78.8	80.3	116.8	170.8	242.4	179.6	255.5	534.4	671.6	429.2	179.6
85°	45.3	43.8	86.1	99.3	108.0	74.5	77.4	160.6	210.2	181.0	102.2
87.5°	5.8	8.8	33.6	26.3	14.6	16.1	16.1	27.7	40.9	43.8	21.9
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°	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1	2533.1
2.5°	2536.0	2534.6	2530.2	2525.8	2515.6	2509.8	2512.7	2509.8	2508.3	2509.8	2515.6
5°	2555.0	2550.6	2539.0	2524.4	2503.9	2479.1	2463.0	2439.7	2417.8	2404.6	2407.6
7.5°	2606.1	2601.7	2585.7	2544.8	2479.1	2375.4	2280.5	2197.3	2134.5	2098.0	2099.5
10°	2687.9	2680.6	2655.8	2565.2	2393.0	2166.7	1978.3	1822.1	1719.9	1671.7	1667.3
12.5°	2784.2	2775.5	2731.7	2546.3	2229.4	1876.1	1616.2	1442.5	1347.6	1305.3	1300.9
15°	2898.1	2886.4	2800.3	2455.7	1991.5	1554.9	1316.9	1187.0	1125.7	1087.7	1089.2
17.5°	3039.7	3019.3	2851.4	2320.0	1733.0	1309.6	1133.0	1035.1	981.1	944.6	941.7
20°	3223.7	3190.1	2892.3	2157.9	1495.1	1154.9	1008.9	927.1	886.2	854.1	848.3
22.5°	3480.7	3432.5	2941.9	1982.7	1327.2	1048.3	916.9	857.0	823.4	786.9	781.1
25°	3799.0	3742.0	3003.2	1820.6	1211.8	956.3	849.7	800.1	760.7	718.3	713.9
27.5°	4244.3	4142.1	3076.2	1687.8	1112.5	877.5	788.4	732.9	687.7	652.6	645.3
30°	4740.7	4572.8	3140.5	1607.5	1022.0	804.5	708.1	652.6	610.3	585.5	581.1
32.5°	5210.8	4983.0	3182.8	1572.4	940.2	721.2	620.5	560.6	528.5	521.2	525.6
35°	5654.6	5353.9	3178.4	1538.9	867.2	638.0	534.4	473.0	448.2	452.6	452.6
37.5°	6165.6	5749.5	3147.8	1486.3	807.4	562.1	459.9	405.9	384.0	385.4	391.3
40°	6759.9	6206.5	3128.8	1387.0	741.7	492.0	398.6	354.8	338.7	332.9	331.4
42.5°	7393.5	6648.9	3131.7	1274.6	659.9	429.2	356.2	319.7	305.1	300.8	299.3
45°	8030.1	7070.8	3136.1	1157.8	573.8	381.1	325.6	294.9	286.2	280.3	280.3
47.5°	8628.7	7430.0	3054.3	1032.2	489.1	344.6	300.8	280.3	273.0	265.7	265.7
50°	9186.4	7669.5	2857.2	886.2	421.9	315.4	281.8	267.2	259.9	252.6	252.6
52.5°	9620.0	7707.4	2531.7	735.8	375.2	293.5	270.1	257.0	248.2	240.9	239.4
55°	9812.8	7469.4	2068.8	595.7	338.7	274.5	258.4	245.3	235.1	227.8	226.3
57.5°	9763.1	6968.6	1613.3	478.9	303.7	255.5	243.8	235.1	223.4	211.7	210.2
60°	9519.3	6298.5	1216.2	398.6	271.6	235.1	227.8	220.5	204.4	186.9	184.0
62.5°	9097.3	5456.1	867.2	330.0	236.5	211.7	208.8	202.9	179.6	147.5	144.5
65°	8452.0	4432.6	584.0	274.5	202.9	185.4	186.9	176.7	146.0	109.5	106.6
67.5°	7508.9	3241.2	373.8	224.8	169.4	154.8	156.2	150.4	124.1	93.4	89.1
70°	6307.3	2146.2	243.8	170.8	135.8	119.7	128.5	129.9	105.1	75.9	73.0
72.5°	4623.9	1267.3	170.8	127.0	99.3	83.2	105.1	108.0	84.7	56.9	54.0
75°	2635.3	601.5	128.5	92.0	61.3	58.4	81.8	81.8	58.4	38.0	35.0
77.5°	1106.7	251.1	90.5	59.9	35.0	33.6	55.5	51.1	29.2	17.5	17.5
80°	319.7	112.4	48.2	29.2	14.6	13.1	21.9	16.1	7.3	2.9	2.9
82.5°	125.6	49.6	19.0	11.7	5.8	5.8	2.9	0.0	0.0	0.0	0.0
85°	74.5	20.4	8.8	4.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.0	4.4	2.9	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)