

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: P883478

Luminaire Tested: **NAV-SB3D-830-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883478
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-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 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: 20946 lumens
Efficiency: N/A
Efficacy: 96.0 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

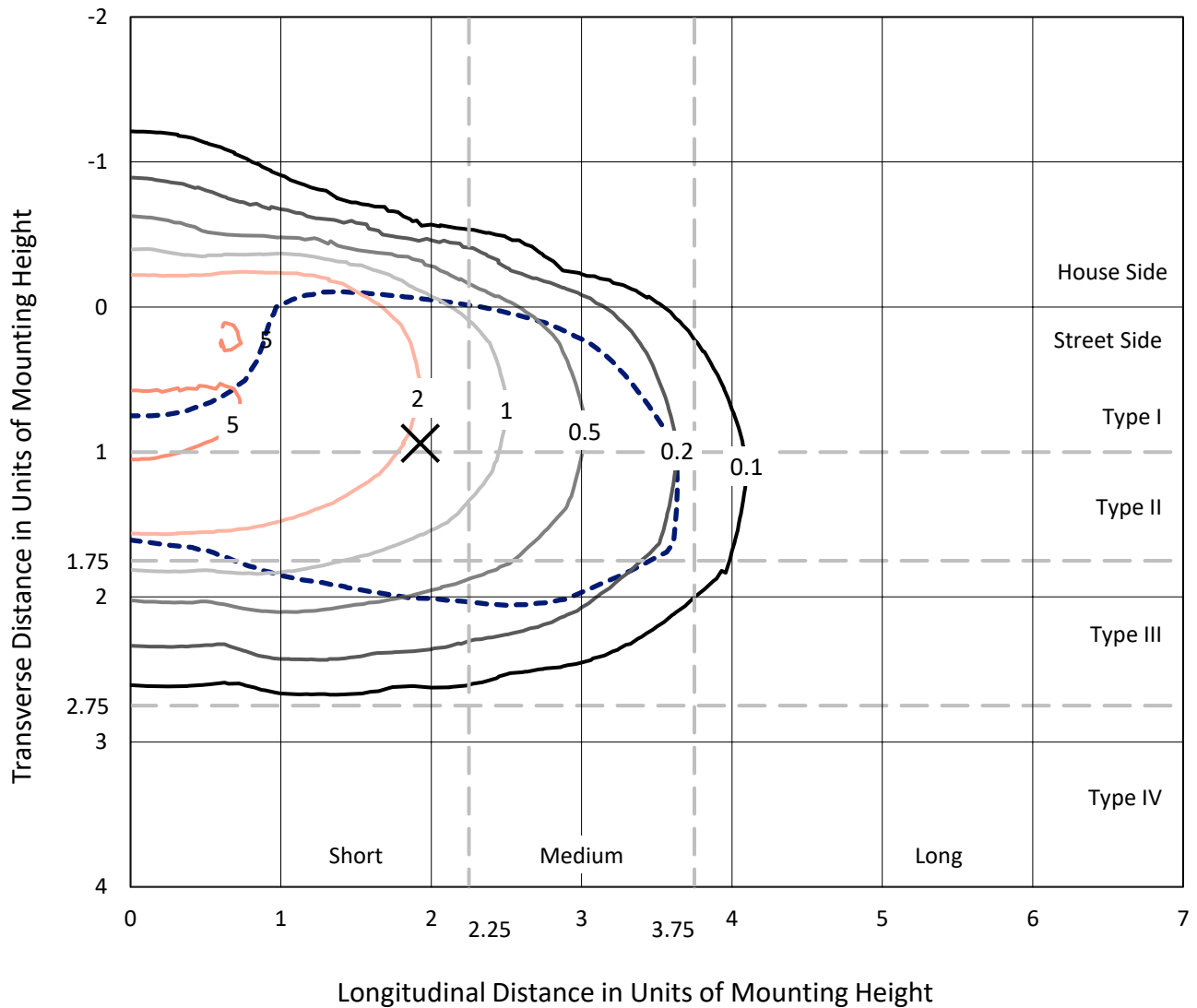
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

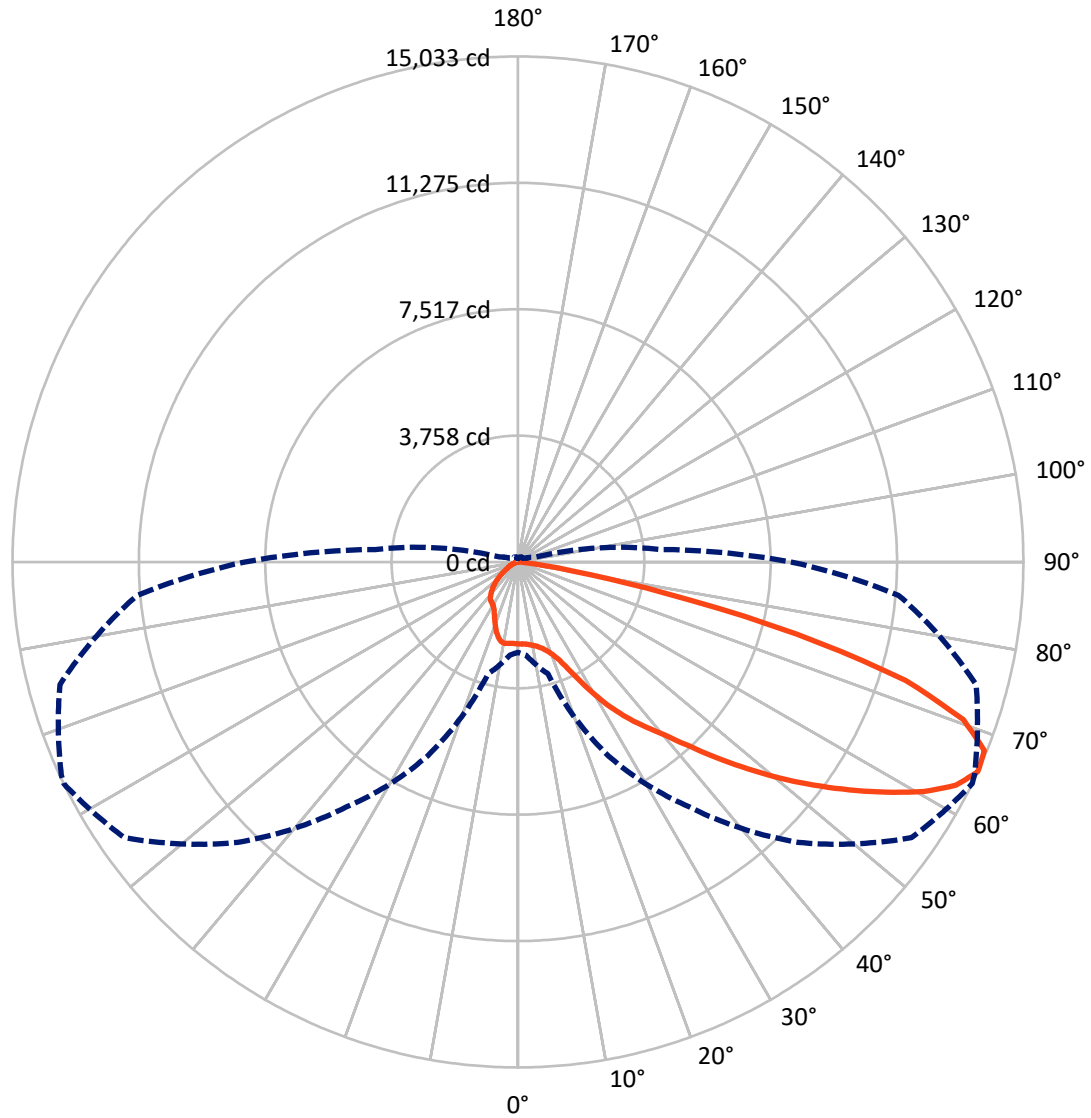
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 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	2801.1	0.0	2801.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	18144.9	0.0	18144.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	20946.0	0.0	20946.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.8	1.1
10°-20°	609.6	2.9
20°-30°	1155.2	5.5
30°-40°	2337.6	11.2
40°-50°	3982.1	19.0
50°-60°	5415.3	25.9
60°-70°	5085.3	24.3
70°-80°	2037.4	9.7
80°-90°	98.7	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°	20946.0	100.0
0°-180°	20946.0	100.0

Coefficient of Utilization



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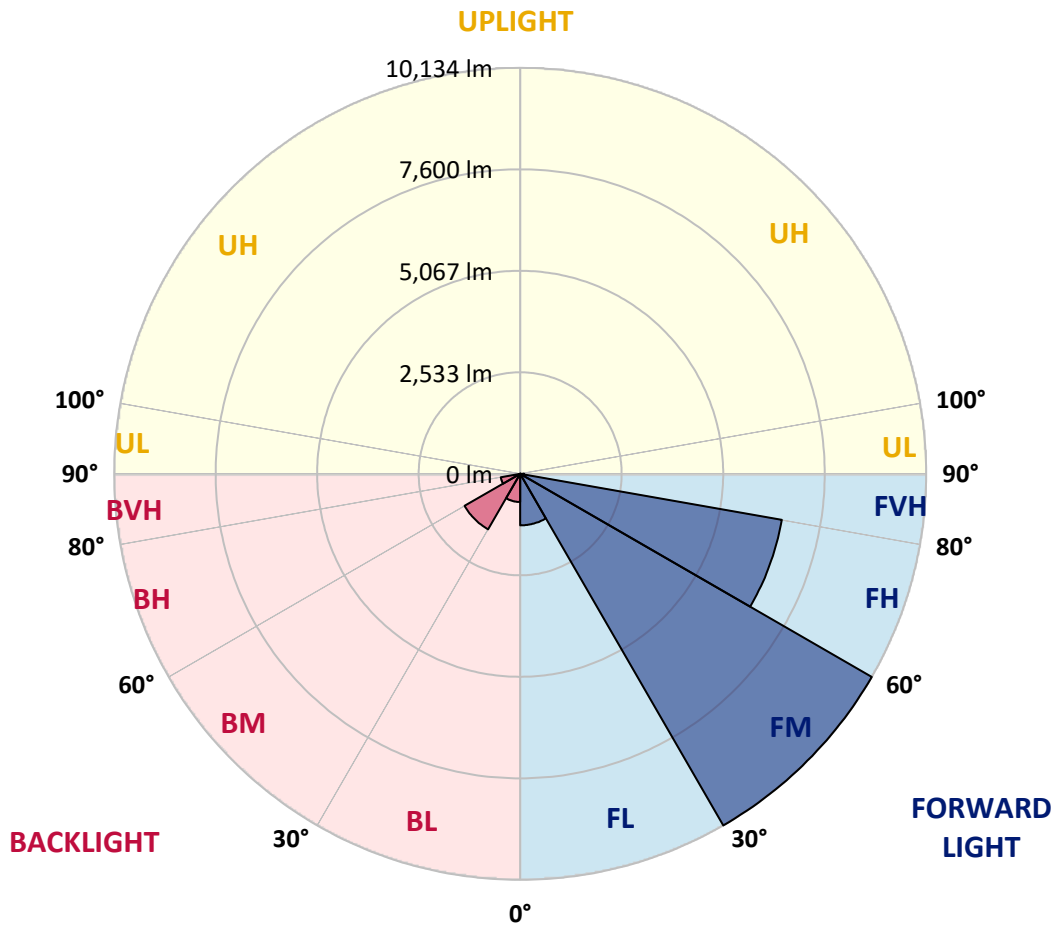
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1286.3	6.1			
FM (30°-60°)	10133.6	48.4			
FH (60°-80°)	6631.0	31.7			G3/7500
FVH (80°-90°)	93.9	0.4			G1/100
BL (0°-30°)	703.3	3.4	B2/1000		
BM (30°-60°)	1601.4	7.6	B2/2500		
BH (60°-80°)	491.6	2.3	B1/500		G1/500
BVH (80°-90°)	4.8	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°	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2
2.5°	2427.8	2444.7	2440.4	2436.2	2434.8	2437.6	2439.0	2437.6	2437.6	2437.6	2439.0
5°	2381.5	2395.5	2395.5	2405.3	2419.4	2436.2	2448.9	2451.7	2454.5	2458.7	2457.3
7.5°	2293.0	2304.2	2312.7	2345.0	2380.1	2425.0	2462.9	2482.6	2485.4	2500.8	2506.4
10°	2232.6	2246.7	2260.7	2294.4	2345.0	2412.4	2477.0	2524.7	2531.7	2568.2	2585.1
12.5°	2229.8	2243.9	2262.1	2298.6	2357.6	2429.2	2507.9	2576.7	2589.3	2642.7	2677.8
15°	2259.3	2276.2	2293.0	2337.9	2401.1	2488.2	2572.4	2658.1	2670.7	2746.6	2784.5
17.5°	2319.7	2342.2	2354.8	2399.7	2467.1	2564.0	2674.9	2773.2	2784.5	2872.9	2920.7
20°	2439.0	2465.7	2469.9	2506.4	2572.4	2676.4	2808.3	2930.5	2944.5	3045.6	3099.0
22.5°	2686.2	2724.1	2690.4	2708.6	2767.6	2871.5	3014.8	3169.2	3188.9	3304.0	3351.8
25°	3121.5	3174.8	3087.8	3056.9	3082.2	3190.3	3370.0	3565.2	3587.7	3680.3	3704.2
27.5°	3976.6	3907.8	3775.8	3646.6	3570.8	3632.6	3834.8	4076.3	4104.4	4194.3	4166.2
30°	4916.0	4855.6	4677.3	4390.8	4211.1	4201.3	4388.0	4657.6	4689.9	4775.6	4689.9
32.5°	5856.8	5799.2	5605.5	5253.0	4941.3	4786.8	4916.0	5215.1	5231.9	5286.7	5160.3
35°	6782.1	6723.2	6529.4	6168.5	5785.2	5434.1	5408.9	5745.9	5751.5	5809.1	5620.9
37.5°	7713.1	7664.0	7457.6	7103.7	6726.0	6241.5	6007.0	6248.6	6255.6	6311.8	6116.6
40°	8377.3	8398.3	8256.5	7982.7	7658.4	7129.0	6678.2	6783.6	6741.4	6835.5	6719.0
42.5°	8947.4	8989.5	8865.9	8728.3	8540.2	8074.0	7509.5	7491.3	7423.9	7474.4	7353.6
45°	9440.2	9475.3	9364.4	9332.1	9327.9	9000.7	8418.0	8308.5	8214.4	8204.6	8059.9
47.5°	9621.4	9688.8	9736.5	9844.6	10055.3	9917.7	9357.4	9187.5	9082.2	9005.0	8776.1
50°	9690.2	9761.8	9924.7	10239.2	10737.7	10796.7	10292.6	10101.6	9972.4	9832.0	9495.0
52.5°	9597.5	9725.3	9944.3	10473.7	11196.9	11501.6	11189.8	11022.7	10875.3	10646.4	10146.5
55°	9051.3	9179.1	9627.0	10470.9	11425.7	11995.8	12038.0	11963.5	11797.8	11437.0	10673.1
57.5°	7899.9	8089.4	8798.5	10114.2	11421.5	12421.3	12869.2	12922.6	12737.2	12220.5	11087.3
60°	6304.7	6561.7	7426.7	9323.7	11069.1	12651.6	13598.0	13864.8	13668.2	12992.8	11422.9
62.5°	4399.3	4697.0	5515.6	8085.2	10263.1	12485.9	14130.2	14623.0	14474.2	13683.6	11552.1
65°	2683.4	2778.9	3438.8	6362.3	8892.6	11792.2	14294.5	15033.1	14983.9	14106.3	11361.2
67.5°	1787.5	1867.5	2057.1	4362.8	6902.9	10406.3	13901.3	14961.4	14975.5	14037.5	10661.9
70°	1077.0	1145.8	1269.4	2537.3	4473.7	8236.9	12683.9	14048.7	14130.2	13117.8	9336.3
72.5°	443.7	490.1	602.4	1150.0	2316.9	5227.7	10100.2	12061.8	12251.4	11029.8	7165.5
75°	251.3	275.2	353.9	577.1	1005.4	2436.2	6118.0	8562.6	8842.1	7602.2	4310.8
77.5°	167.1	178.3	228.9	373.5	565.9	831.3	2614.6	4461.1	4994.6	4152.1	1866.1
80°	112.3	122.2	157.3	249.9	367.9	356.7	832.7	1652.7	2033.2	1426.6	455.0
82.5°	75.8	77.2	112.3	164.3	233.1	172.7	245.7	513.9	645.9	412.8	172.7
85°	43.5	42.1	82.8	95.5	103.9	71.6	74.4	154.5	202.2	174.1	98.3
87.5°	5.6	8.4	32.3	25.3	14.0	15.4	15.4	26.7	39.3	42.1	21.1
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°	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2	2436.2
2.5°	2439.0	2437.6	2433.4	2429.2	2419.4	2413.8	2416.6	2413.8	2412.4	2413.8	2419.4
5°	2457.3	2453.1	2441.9	2427.8	2408.2	2384.3	2368.8	2346.4	2325.3	2312.7	2315.5
7.5°	2506.4	2502.2	2486.8	2447.5	2384.3	2284.6	2193.3	2113.3	2052.9	2017.8	2019.2
10°	2585.1	2578.1	2554.2	2467.1	2301.4	2083.8	1902.7	1752.4	1654.1	1607.8	1603.6
12.5°	2677.8	2669.3	2627.2	2448.9	2144.2	1804.4	1554.4	1387.3	1296.1	1255.3	1251.1
15°	2787.3	2776.0	2693.2	2361.8	1915.3	1495.4	1266.6	1141.6	1082.6	1046.1	1047.5
17.5°	2923.5	2903.8	2742.3	2231.2	1666.8	1259.5	1089.6	995.6	943.6	908.5	905.7
20°	3100.4	3068.1	2781.7	2075.4	1437.9	1110.7	970.3	891.6	852.3	821.4	815.8
22.5°	3347.5	3301.2	2829.4	1906.9	1276.4	1008.2	881.8	824.2	792.0	756.8	751.2
25°	3653.7	3598.9	2888.4	1751.0	1165.5	919.7	817.2	769.5	731.6	690.9	686.6
27.5°	4081.9	3983.6	2958.6	1623.2	1070.0	843.9	758.3	704.9	661.4	627.7	620.6
30°	4559.3	4397.9	3020.4	1546.0	982.9	773.7	681.0	627.7	586.9	563.1	558.9
32.5°	5011.5	4792.4	3061.1	1512.3	904.3	693.7	596.8	539.2	508.3	501.3	505.5
35°	5438.4	5149.1	3056.9	1480.0	834.1	613.6	513.9	455.0	431.1	435.3	435.3
37.5°	5929.8	5529.6	3027.4	1429.4	776.5	540.6	442.3	390.4	369.3	370.7	376.3
40°	6501.3	5969.1	3009.1	1334.0	713.3	473.2	383.3	341.2	325.8	320.2	318.7
42.5°	7110.7	6394.6	3011.9	1225.8	634.7	412.8	342.6	307.5	293.5	289.3	287.9
45°	7722.9	6800.4	3016.2	1113.5	551.8	366.5	313.1	283.6	275.2	269.6	269.6
47.5°	8298.7	7145.8	2937.5	992.7	470.4	331.4	289.3	269.6	262.6	255.6	255.6
50°	8835.0	7376.1	2748.0	852.3	405.8	303.3	271.0	257.0	249.9	242.9	242.9
52.5°	9252.1	7412.6	2434.8	707.7	360.9	282.2	259.8	247.1	238.7	231.7	230.3
55°	9437.4	7183.7	1989.7	572.9	325.8	264.0	248.5	235.9	226.1	219.1	217.6
57.5°	9389.7	6702.1	1551.6	460.6	292.1	245.7	234.5	226.1	214.8	203.6	202.2
60°	9155.2	6057.6	1169.7	383.3	261.2	226.1	219.1	212.0	196.6	179.7	176.9
62.5°	8749.4	5247.4	834.1	317.3	227.5	203.6	200.8	195.2	172.7	141.8	139.0
65°	8128.7	4263.1	561.7	264.0	195.2	178.3	179.7	169.9	140.4	105.3	102.5
67.5°	7221.7	3117.3	359.5	216.2	162.9	148.8	150.2	144.6	119.4	89.9	85.7
70°	6066.0	2064.1	234.5	164.3	130.6	115.1	123.6	125.0	101.1	73.0	70.2
72.5°	4447.0	1218.8	164.3	122.2	95.5	80.0	101.1	103.9	81.4	54.8	52.0
75°	2534.5	578.5	123.6	88.5	59.0	56.2	78.6	78.6	56.2	36.5	33.7
77.5°	1064.4	241.5	87.1	57.6	33.7	32.3	53.4	49.1	28.1	16.9	16.9
80°	307.5	108.1	46.3	28.1	14.0	12.6	21.1	15.4	7.0	2.8	2.8
82.5°	120.8	47.7	18.3	11.2	5.6	5.6	2.8	0.0	0.0	0.0	0.0
85°	71.6	19.7	8.4	4.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	18.3	4.2	2.8	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)