

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: P884668

Luminaire Tested: **NAV-SB5C-830-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884668
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-SB5C-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA 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: 26079 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

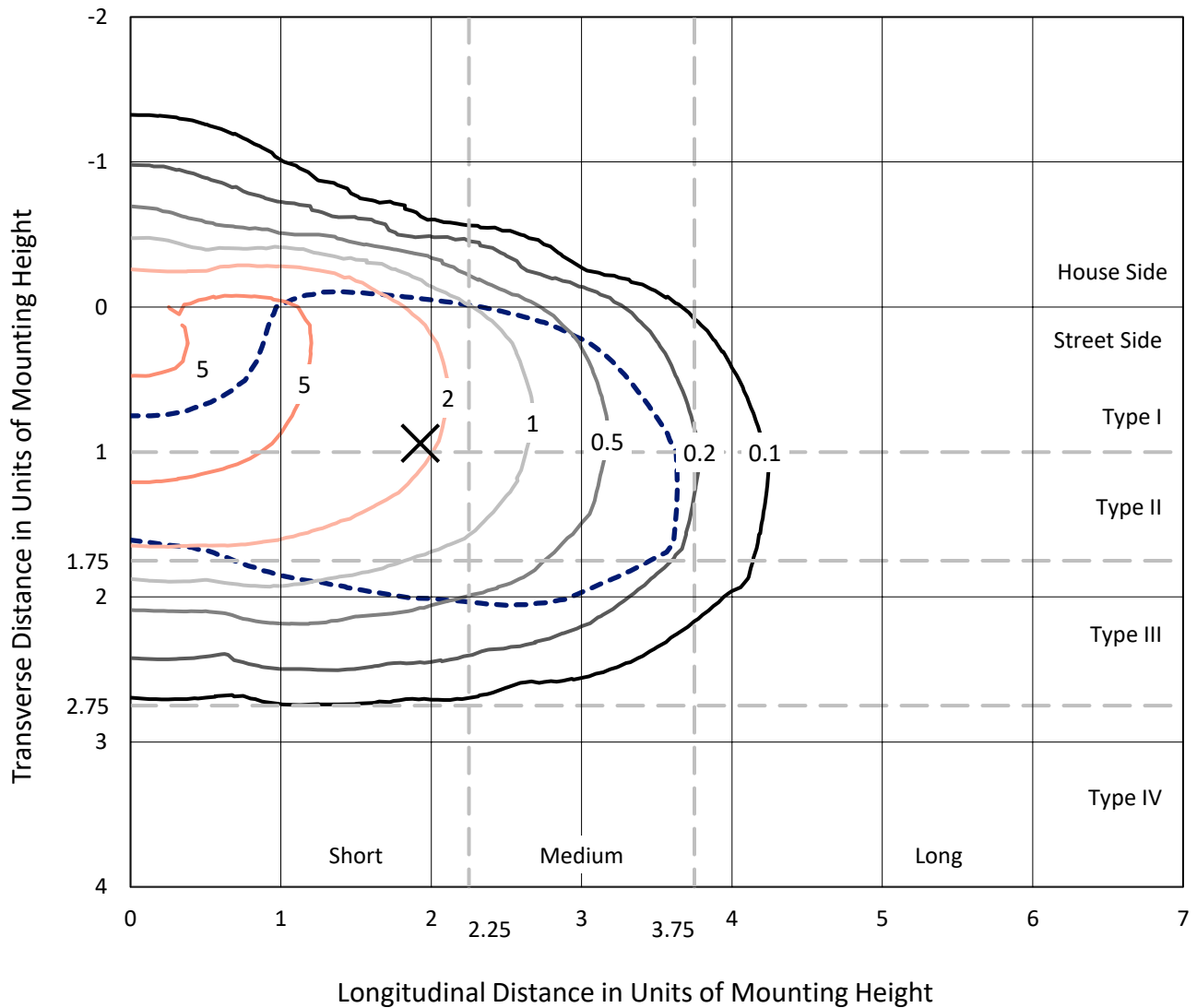
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884668
 CATALOG NUMBER: NAV-SB5C-830-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

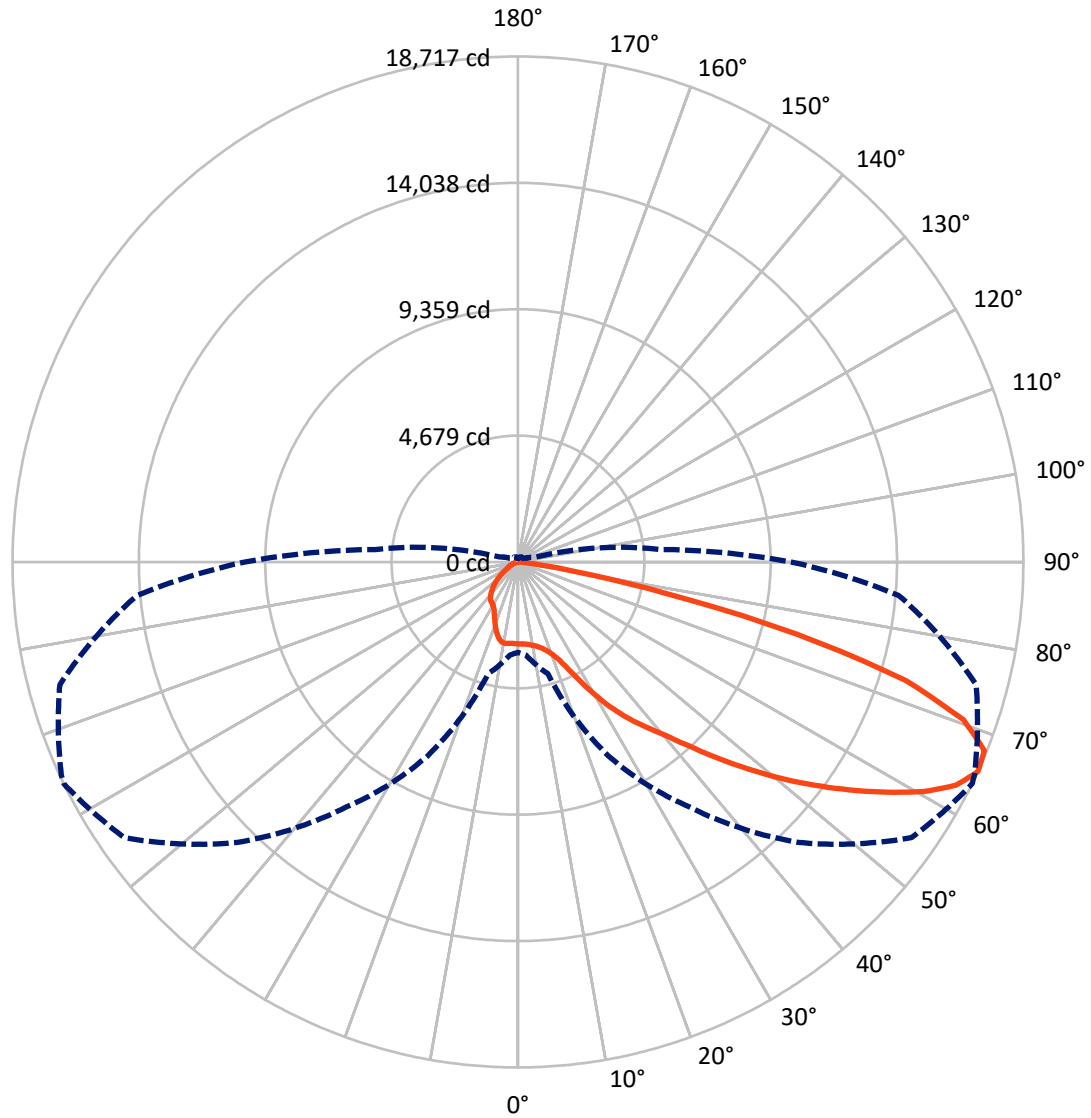
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type III - Short - N/A

REPORT NUMBER: P884668
CATALOG NUMBER: NAV-SB5C-830-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P884668

CATALOG NUMBER: NAV-SB5C-830-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3487.6	0.0	3487.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	22591.4	0.0	22591.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	26079.0	0.0	26079.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.9	1.1
10°-20°	759.0	2.9
20°-30°	1438.3	5.5
30°-40°	2910.4	11.2
40°-50°	4957.9	19.0
50°-60°	6742.4	25.9
60°-70°	6331.5	24.3
70°-80°	2536.7	9.7
80°-90°	122.9	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°	26079.0	100.0
0°-180°	26079.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884668

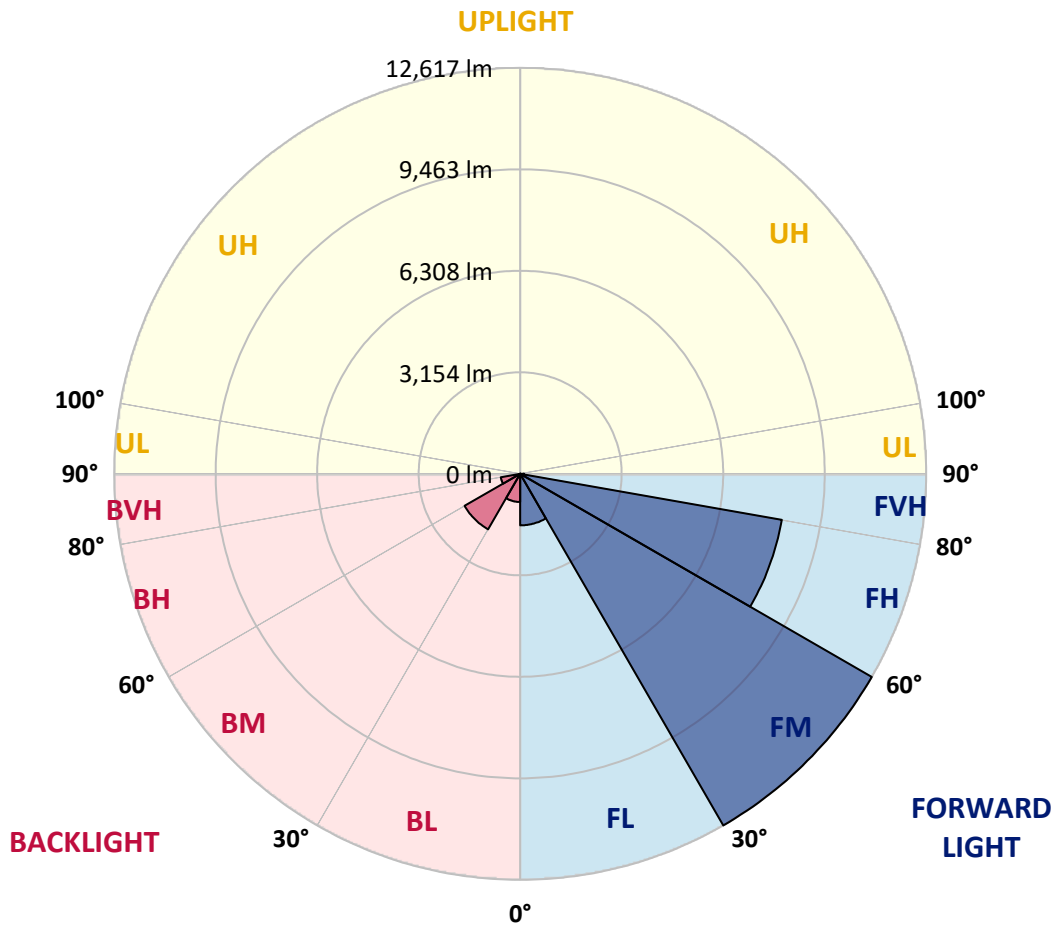
CATALOG NUMBER: NAV-SB5C-830-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1601.6	6.1			
FM (30°-60°)	12617.0	48.4			
FH (60°-80°)	8256.0	31.7			G4/12000
FVH (80°-90°)	116.9	0.4			G2/225
BL (0°-30°)	875.6	3.4	B2/1000		
BM (30°-60°)	1993.8	7.6	B2/2500		
BH (60°-80°)	612.1	2.3	B2/1000		G2/1000
BVH (80°-90°)	6.0	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-G4

Type III Short



REPORT NUMBER: P884668

CATALOG NUMBER: NAV-SB5C-830-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3
2.5°	3022.8	3043.7	3038.5	3033.3	3031.5	3035.0	3036.8	3035.0	3035.0	3035.0	3036.8
5°	2965.1	2982.6	2982.6	2994.8	3012.3	3033.3	3049.0	3052.5	3056.0	3061.2	3059.5
7.5°	2854.9	2868.9	2879.4	2919.6	2963.3	3019.3	3066.5	3091.0	3094.4	3113.7	3120.7
10°	2779.8	2797.2	2814.7	2856.7	2919.6	3003.5	3084.0	3143.4	3152.1	3197.6	3218.6
12.5°	2776.3	2793.7	2816.5	2861.9	2935.4	3024.5	3122.4	3208.1	3223.8	3290.3	3334.0
15°	2813.0	2834.0	2854.9	2910.9	2989.6	3097.9	3202.8	3309.5	3325.2	3419.6	3466.8
17.5°	2888.2	2916.1	2931.9	2987.8	3071.7	3192.4	3330.5	3452.8	3466.8	3577.0	3636.4
20°	3036.8	3070.0	3075.2	3120.7	3202.8	3332.2	3496.6	3648.7	3666.1	3792.0	3858.4
22.5°	3344.5	3391.7	3349.7	3372.4	3445.9	3575.2	3753.5	3945.9	3970.3	4113.7	4173.1
25°	3886.4	3952.9	3844.5	3806.0	3837.5	3972.1	4195.9	4438.9	4466.8	4582.2	4612.0
27.5°	4951.1	4865.5	4701.1	4540.3	4445.9	4522.8	4774.5	5075.2	5110.2	5222.1	5187.1
30°	6120.7	6045.5	5823.5	5466.9	5243.1	5230.8	5463.4	5799.0	5839.2	5945.9	5839.2
32.5°	7292.1	7220.4	6979.1	6540.3	6152.2	5959.9	6120.7	6493.1	6514.1	6582.3	6424.9
35°	8444.2	8370.7	8129.5	7680.2	7202.9	6765.8	6734.4	7153.9	7160.9	7232.6	6998.3
37.5°	9603.3	9542.1	9285.1	8844.5	8374.2	7771.1	7479.1	7779.8	7788.6	7858.5	7615.5
40°	10430.2	10456.4	10279.9	9938.9	9535.1	8876.0	8314.8	8445.9	8393.5	8510.6	8365.5
42.5°	11140.0	11192.5	11038.6	10867.3	10633.0	10052.6	9349.8	9327.1	9243.1	9306.1	9155.7
45°	11753.7	11797.4	11659.3	11619.0	11613.8	11206.4	10480.9	10344.5	10227.4	10215.2	10035.1
47.5°	11979.2	12063.1	12122.5	12257.2	12519.4	12348.1	11650.5	11439.0	11307.8	11211.7	10926.7
50°	12064.9	12154.0	12356.8	12748.4	13369.1	13442.5	12814.9	12577.1	12416.3	12241.4	11821.8
52.5°	11949.5	12108.6	12381.3	13040.4	13940.8	14320.1	13932.0	13724.0	13540.4	13255.4	12633.0
55°	11269.4	11428.5	11986.2	13036.9	14225.7	14935.5	14988.0	14895.3	14689.0	14239.7	13288.6
57.5°	9835.8	10071.8	10954.7	12592.8	14220.5	15465.2	16022.9	16089.4	15858.6	15215.2	13804.4
60°	7849.8	8169.7	9246.6	11608.6	13781.7	15752.0	16930.3	17262.5	17017.7	16176.8	14222.2
62.5°	5477.3	5848.0	6867.2	10066.6	12778.1	15545.7	17592.9	18206.5	18021.2	17036.9	14383.1
65°	3341.0	3459.8	4281.5	7921.4	11071.8	14682.0	17797.4	18717.0	18655.9	17563.2	14145.3
67.5°	2225.6	2325.2	2561.2	5431.9	8594.5	12956.5	17307.9	18627.9	18645.4	17477.5	13274.7
70°	1340.9	1426.6	1580.4	3159.1	5570.0	10255.4	15792.2	17491.5	17592.9	16332.4	11624.3
72.5°	552.5	610.1	750.0	1431.8	2884.7	6508.8	12575.3	15017.7	15253.7	13732.7	8921.5
75°	312.9	342.7	440.6	718.5	1251.8	3033.3	7617.2	10661.0	11008.9	9465.2	5367.2
77.5°	208.0	222.0	285.0	465.0	704.6	1035.0	3255.3	5554.3	6218.6	5169.7	2323.5
80°	139.9	152.1	195.8	311.2	458.0	444.1	1036.7	2057.7	2531.5	1776.2	566.4
82.5°	94.4	96.2	139.9	204.5	290.2	215.0	305.9	639.9	804.2	514.0	215.0
85°	54.2	52.4	103.1	118.9	129.4	89.2	92.7	192.3	251.8	216.8	122.4
87.5°	7.0	10.5	40.2	31.5	17.5	19.2	19.2	33.2	49.0	52.4	26.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P884668

CATALOG NUMBER: NAV-SB5C-830-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3	3033.3
2.5°	3036.8	3035.0	3029.8	3024.5	3012.3	3005.3	3008.8	3005.3	3003.5	3005.3	3012.3
5°	3059.5	3054.2	3040.3	3022.8	2998.3	2968.6	2949.3	2921.4	2895.1	2879.4	2882.9
7.5°	3120.7	3115.4	3096.2	3047.2	2968.6	2844.4	2730.8	2631.2	2556.0	2512.3	2514.0
10°	3218.6	3209.8	3180.1	3071.7	2865.4	2594.4	2368.9	2181.8	2059.5	2001.8	1996.5
12.5°	3334.0	3323.5	3271.0	3049.0	2669.6	2246.5	1935.3	1727.3	1613.7	1563.0	1557.7
15°	3470.3	3456.3	3353.2	2940.6	2384.6	1861.9	1576.9	1421.3	1347.9	1302.5	1304.2
17.5°	3639.9	3615.4	3414.4	2778.0	2075.2	1568.2	1356.7	1239.5	1174.8	1131.1	1127.6
20°	3860.2	3820.0	3463.3	2584.0	1790.2	1382.9	1208.1	1110.2	1061.2	1022.7	1015.7
22.5°	4167.9	4110.2	3522.8	2374.2	1589.2	1255.3	1097.9	1026.2	986.0	942.3	935.3
25°	4549.0	4480.8	3596.2	2180.1	1451.1	1145.1	1017.5	958.1	910.9	860.2	854.9
27.5°	5082.2	4959.9	3683.6	2021.0	1332.2	1050.7	944.1	877.6	823.4	781.5	772.7
30°	5676.7	5475.6	3760.5	1924.9	1223.8	963.3	847.9	781.5	730.8	701.1	695.8
32.5°	6239.6	5966.9	3811.2	1882.9	1125.9	863.6	743.0	671.3	632.9	624.1	629.4
35°	6771.1	6410.9	3806.0	1842.7	1038.5	764.0	639.9	566.4	536.7	542.0	542.0
37.5°	7383.0	6884.7	3769.3	1779.7	966.8	673.1	550.7	486.0	459.8	461.5	468.5
40°	8094.5	7431.9	3746.6	1660.9	888.1	589.2	477.3	424.8	405.6	398.6	396.9
42.5°	8853.3	7961.6	3750.1	1526.2	790.2	514.0	426.6	382.9	365.4	360.1	358.4
45°	9615.5	8466.9	3755.3	1386.4	687.1	456.3	389.9	353.2	342.7	335.7	335.7
47.5°	10332.3	8897.0	3657.4	1236.0	585.7	412.6	360.1	335.7	326.9	318.2	318.2
50°	11000.2	9183.7	3421.4	1061.2	505.3	377.6	337.4	319.9	311.2	302.5	302.5
52.5°	11519.4	9229.1	3031.5	881.1	449.3	351.4	323.4	307.7	297.2	288.5	286.7
55°	11750.2	8944.2	2477.3	713.3	405.6	328.7	309.4	293.7	281.5	272.7	271.0
57.5°	11690.7	8344.5	1931.8	573.4	363.6	305.9	292.0	281.5	267.5	253.5	251.8
60°	11398.8	7542.1	1456.3	477.3	325.2	281.5	272.7	264.0	244.8	223.8	220.3
62.5°	10893.5	6533.3	1038.5	395.1	283.2	253.5	250.0	243.0	215.0	176.6	173.1
65°	10120.8	5307.8	699.3	328.7	243.0	222.0	223.8	211.5	174.8	131.1	127.6
67.5°	8991.4	3881.2	447.6	269.2	202.8	185.3	187.1	180.1	148.6	111.9	106.6
70°	7552.6	2570.0	292.0	204.5	162.6	143.4	153.8	155.6	125.9	90.9	87.4
72.5°	5536.8	1517.5	204.5	152.1	118.9	99.7	125.9	129.4	101.4	68.2	64.7
75°	3155.6	720.3	153.8	110.1	73.4	69.9	97.9	97.9	69.9	45.5	42.0
77.5°	1325.2	300.7	108.4	71.7	42.0	40.2	66.4	61.2	35.0	21.0	21.0
80°	382.9	134.6	57.7	35.0	17.5	15.7	26.2	19.2	8.7	3.5	3.5
82.5°	150.4	59.4	22.7	14.0	7.0	7.0	3.5	0.0	0.0	0.0	0.0
85°	89.2	24.5	10.5	5.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	22.7	5.2	3.5	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)