

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: P883756

Luminaire Tested: **NAV-SB4B-730-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-730-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16404 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

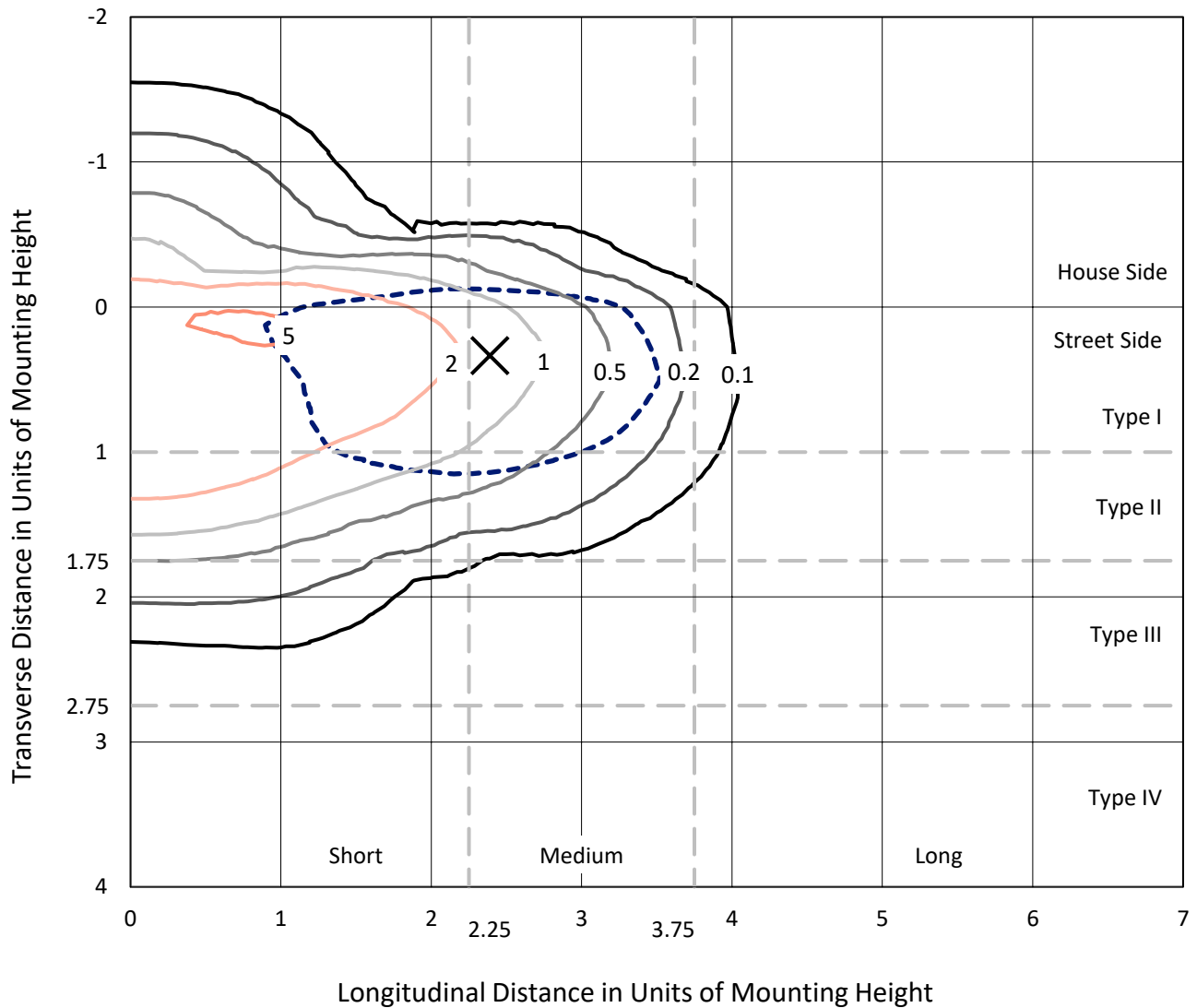
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883756
 CATALOG NUMBER: NAV-SB4B-730-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

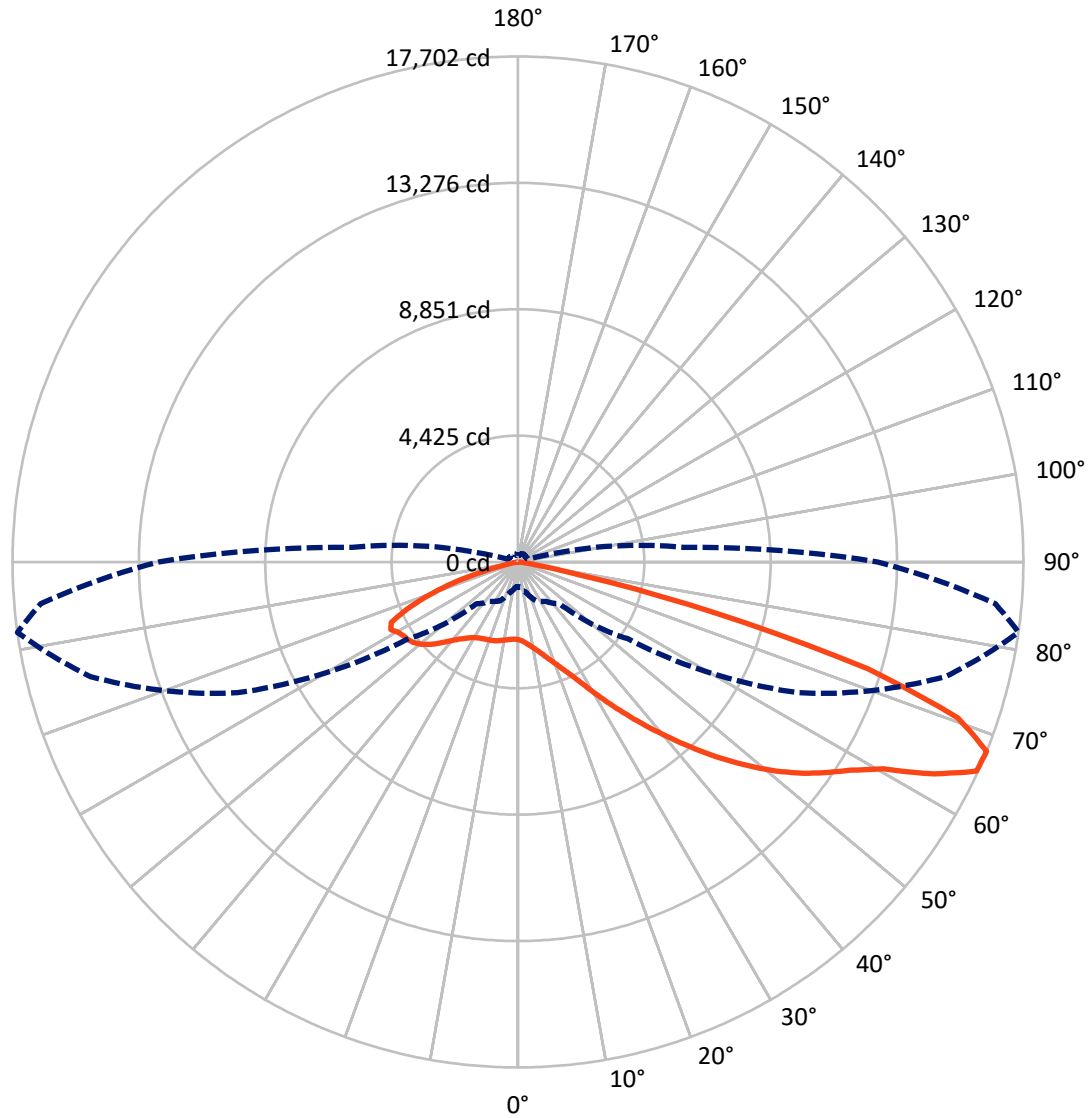
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Medium - N/A

REPORT NUMBER: P883756
CATALOG NUMBER: NAV-SB4B-730-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P883756

CATALOG NUMBER: NAV-SB4B-730-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2971.4	0.0	2971.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	13432.6	0.0	13432.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	16404.0	0.0	16404.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.1	1.5
10°-20°	629.2	3.8
20°-30°	1007.7	6.1
30°-40°	1782.0	10.9
40°-50°	3122.2	19.0
50°-60°	4164.1	25.4
60°-70°	3876.6	23.6
70°-80°	1487.8	9.1
80°-90°	92.4	0.6
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°	16404.0	100.0
0°-180°	16404.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883756

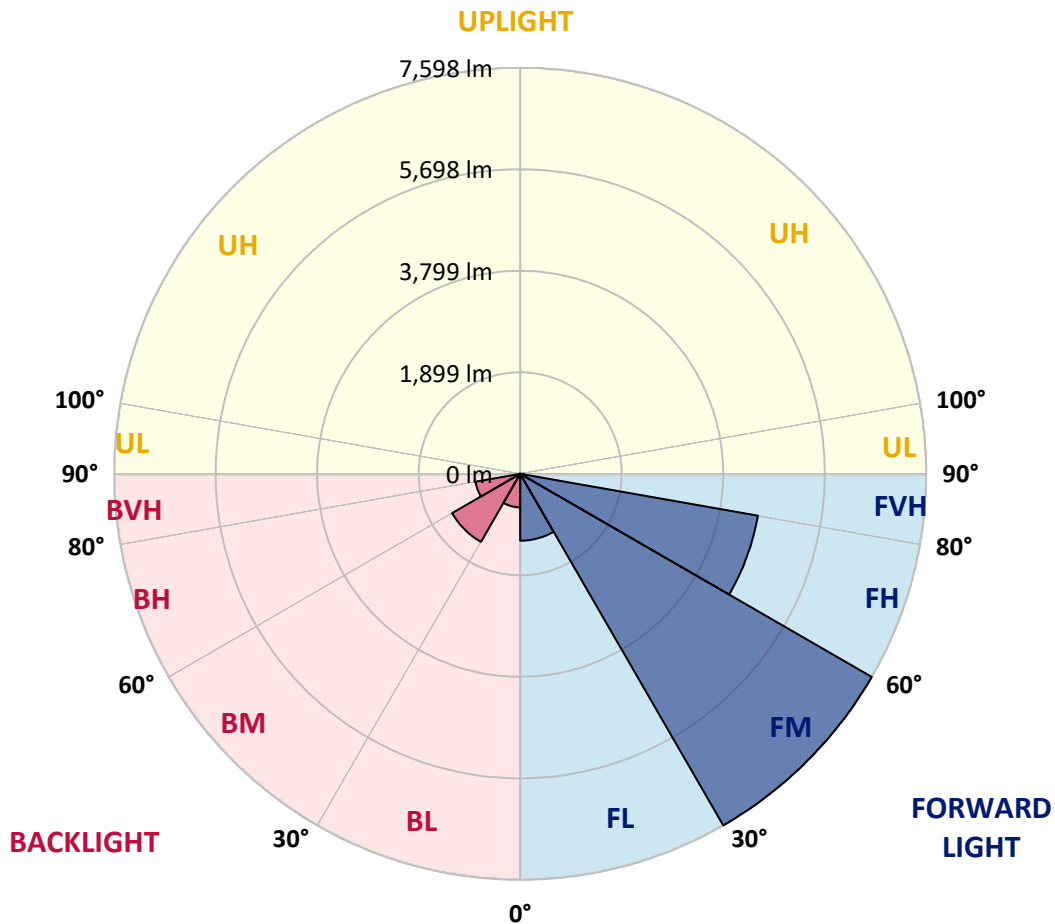
CATALOG NUMBER: NAV-SB4B-730-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1251.4	7.6			
FM (30°-60°)	7597.7	46.3			
FH (60°-80°)	4516.3	27.5			G2/5000
FVH (80°-90°)	67.2	0.4			G1/100
BL (0°-30°)	627.6	3.8	B2/1000		
BM (30°-60°)	1470.5	9.0	B2/2500		
BH (60°-80°)	848.1	5.2	B2/1000		G2/1000
BVH (80°-90°)	25.2	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



REPORT NUMBER: P883756
 CATALOG NUMBER: NAV-SB4B-730-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6
2.5°	2872.3	2888.8	2879.4	2874.7	2866.4	2854.6	2845.1	2815.6	2784.9	2764.8	2757.7
5°	2930.2	2946.7	2945.5	2950.3	2956.2	2959.7	2957.3	2924.3	2880.6	2846.3	2826.2
7.5°	2880.6	2899.5	2914.8	2938.4	2979.8	3023.5	3044.7	3037.7	2992.8	2945.5	2920.7
10°	2740.0	2760.1	2796.7	2852.2	2939.6	3034.1	3113.2	3149.9	3121.5	3069.5	3035.3
12.5°	2482.6	2502.6	2574.7	2695.1	2841.6	3005.8	3156.9	3255.0	3262.1	3210.1	3169.9
15°	2193.2	2213.3	2290.0	2441.2	2664.4	2927.8	3180.6	3366.0	3428.6	3383.7	3335.3
17.5°	2013.7	2031.4	2089.3	2210.9	2443.6	2771.9	3172.3	3484.1	3627.0	3591.6	3533.7
20°	1959.4	1974.7	2001.9	2086.9	2280.6	2610.1	3118.0	3595.1	3840.8	3820.7	3755.7
22.5°	2017.2	2031.4	2039.7	2077.5	2199.1	2503.8	3049.5	3708.5	4088.8	4091.1	4012.0
25°	2150.7	2164.9	2155.4	2179.0	2232.2	2470.7	3023.5	3841.9	4400.6	4426.6	4336.8
27.5°	2370.4	2371.5	2349.1	2347.9	2356.2	2520.4	3050.6	3984.9	4793.9	4842.3	4731.3
30°	2810.9	2793.2	2707.0	2613.7	2571.1	2669.2	3126.2	4153.7	5258.0	5344.2	5204.9
32.5°	3490.0	3464.0	3305.7	3082.5	2858.1	2908.9	3262.1	4346.3	5763.5	5919.4	5749.3
35°	4227.0	4219.9	4054.5	3722.7	3330.6	3250.2	3482.9	4599.0	6315.1	6563.1	6361.1
37.5°	4912.0	4908.4	4813.9	4423.0	3945.9	3726.2	3837.2	4929.7	6905.6	7264.6	7026.0
40°	5537.9	5548.6	5454.1	5104.5	4623.8	4336.8	4319.1	5338.3	7562.2	8028.8	7745.3
42.5°	6078.8	6090.7	5995.0	5736.3	5293.4	5012.4	4910.8	5839.1	8203.5	8849.6	8514.2
45°	6446.2	6519.4	6505.2	6298.5	5980.8	5689.1	5621.8	6467.4	8934.6	9720.0	9326.7
47.5°	6550.1	6617.4	6723.7	6752.0	6558.4	6271.4	6351.7	7224.5	9674.0	10591.6	10144.0
50°	6293.8	6356.4	6577.2	6871.3	7006.0	6917.4	7061.5	8035.8	10431.0	11460.9	10945.9
52.5°	5788.3	5852.1	6130.8	6596.1	7145.3	7424.1	7773.6	8835.4	11164.4	12284.1	11705.4
55°	5057.2	5124.6	5482.4	6009.2	6879.6	7633.1	8367.7	9633.8	11836.4	13024.6	12390.4
57.5°	4062.8	4112.4	4484.4	5221.4	6211.1	7425.2	8805.9	10505.4	12469.5	13752.1	13069.5
60°	2647.9	2691.6	3123.9	3945.9	5103.3	6730.8	8893.3	11477.4	13310.4	14698.1	13984.8
62.5°	1760.9	1790.5	2046.8	2650.3	3593.9	5397.4	8381.9	12253.4	14543.4	16344.5	15554.4
65°	1208.2	1237.7	1494.0	1914.5	2321.9	3570.3	6911.5	12150.6	15660.7	17651.9	16717.7
67.5°	862.2	887.0	1104.3	1501.1	1680.6	2073.9	4685.2	10837.3	15500.1	17701.5	16780.3
70°	617.7	631.9	811.4	1169.2	1335.8	1246.0	2605.4	8288.6	13571.4	16345.7	15502.4
72.5°	432.3	437.0	563.4	890.5	1075.9	909.4	1240.1	5526.1	10264.5	12829.7	12018.3
75°	292.9	298.8	379.1	653.1	863.3	694.5	656.7	2963.2	6025.7	7101.6	6365.8
77.5°	179.5	181.9	244.5	446.4	646.0	529.1	422.8	1255.5	2331.4	2288.9	1951.1
80°	101.6	101.6	155.9	277.5	440.5	341.3	296.4	533.8	738.2	648.4	571.6
82.5°	56.7	57.9	113.4	172.4	291.7	202.0	163.0	246.8	318.9	282.3	245.7
85°	23.6	26.0	69.7	81.5	139.4	100.4	66.1	103.9	118.1	105.1	76.8
87.5°	2.4	3.5	21.3	15.4	16.5	20.1	9.4	20.1	16.5	16.5	11.8
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: P883756

CATALOG NUMBER: NAV-SB4B-730-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6	2717.6
2.5°	2735.3	2717.6	2672.7	2620.7	2552.2	2519.2	2474.3	2443.6	2417.6	2420.0	2396.3
5°	2788.5	2743.6	2643.2	2518.0	2362.1	2251.1	2133.0	2051.5	1985.3	1971.2	1939.3
7.5°	2861.7	2790.8	2614.8	2389.3	2125.9	1926.3	1747.9	1633.4	1551.9	1525.9	1499.9
10°	2956.2	2853.4	2578.2	2227.5	1848.3	1594.4	1403.1	1313.3	1257.8	1238.9	1224.7
12.5°	3066.0	2925.5	2529.8	2030.2	1562.5	1318.0	1196.4	1151.5	1133.8	1127.9	1124.4
15°	3204.2	3015.2	2456.6	1796.4	1320.4	1149.2	1097.2	1091.3	1093.6	1091.3	1090.1
17.5°	3368.3	3113.2	2337.3	1555.4	1157.4	1062.9	1044.0	1048.8	1054.7	1053.5	1051.1
20°	3547.9	3210.1	2184.9	1341.7	1046.4	1001.5	990.9	995.6	1000.3	998.0	996.8
22.5°	3752.2	3314.0	2016.0	1175.1	972.0	944.8	933.0	934.2	934.2	929.5	927.1
25°	3996.7	3428.6	1838.9	1057.0	915.3	894.1	879.9	875.2	868.1	853.9	851.5
27.5°	4288.4	3550.2	1668.8	974.4	870.4	850.4	833.8	822.0	804.3	780.7	778.3
30°	4616.7	3697.9	1524.7	922.4	835.0	814.9	796.0	778.3	752.3	722.8	720.4
32.5°	5002.9	3856.1	1419.6	888.1	803.1	781.9	759.4	738.2	709.8	680.3	681.5
35°	5463.5	4047.4	1358.2	864.5	778.3	750.0	725.2	701.5	680.3	654.3	651.9
37.5°	5963.1	4250.6	1339.3	852.7	761.8	718.1	689.7	673.2	670.8	655.5	654.3
40°	6509.9	4491.5	1353.5	845.6	744.1	687.4	656.7	653.1	659.0	631.9	633.0
42.5°	7088.6	4777.3	1377.1	837.4	719.3	656.7	627.1	627.1	622.4	584.6	584.6
45°	7714.6	5106.8	1400.7	817.3	689.7	626.0	603.5	595.2	575.2	538.6	537.4
47.5°	8345.3	5442.3	1418.4	780.7	654.3	600.0	579.9	561.0	531.5	498.4	497.2
50°	8944.1	5743.4	1399.5	726.3	614.1	575.2	553.9	527.9	496.0	473.6	470.1
52.5°	9479.1	6004.4	1319.2	662.6	571.6	549.2	530.3	503.1	477.1	453.5	451.2
55°	9944.4	6215.8	1177.5	602.3	533.8	526.7	507.8	473.6	438.2	418.1	415.7
57.5°	10390.8	6376.5	1000.3	552.7	499.6	501.9	473.6	442.9	409.8	388.6	386.2
60°	10984.9	6591.4	820.8	506.7	463.0	470.1	439.3	416.9	375.6	348.4	344.9
62.5°	11934.5	6925.7	651.9	450.0	420.5	422.8	409.8	382.7	333.1	301.2	298.8
65°	12688.0	6802.8	513.8	388.6	372.0	375.6	375.6	346.0	292.9	256.3	252.7
67.5°	12602.9	5824.9	409.8	328.3	326.0	328.3	336.6	311.8	259.8	230.3	225.6
70°	11609.7	4633.2	328.3	272.8	283.5	277.5	301.2	284.6	233.8	204.3	200.8
72.5°	9473.2	3337.6	250.4	225.6	217.3	226.8	271.6	256.3	194.9	161.8	158.3
75°	5535.6	1781.0	186.6	178.3	157.1	189.0	240.9	218.5	148.8	119.3	115.7
77.5°	1802.3	621.2	137.0	131.1	116.9	152.4	205.5	184.2	121.6	94.5	90.9
80°	483.0	187.8	93.3	86.2	75.6	113.4	163.0	146.4	87.4	61.4	60.2
82.5°	193.7	79.1	54.3	48.4	41.3	77.9	128.7	118.1	65.0	39.0	39.0
85°	62.6	26.0	20.1	15.4	18.9	48.4	76.8	80.3	46.1	20.1	15.4
87.5°	8.3	3.5	3.5	4.7	3.5	8.3	23.6	22.4	13.0	2.4	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)