

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: P884266

Luminaire Tested: **NAV-SB5A-730-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884266
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-SB5A-730-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 350mA 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: 16362 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

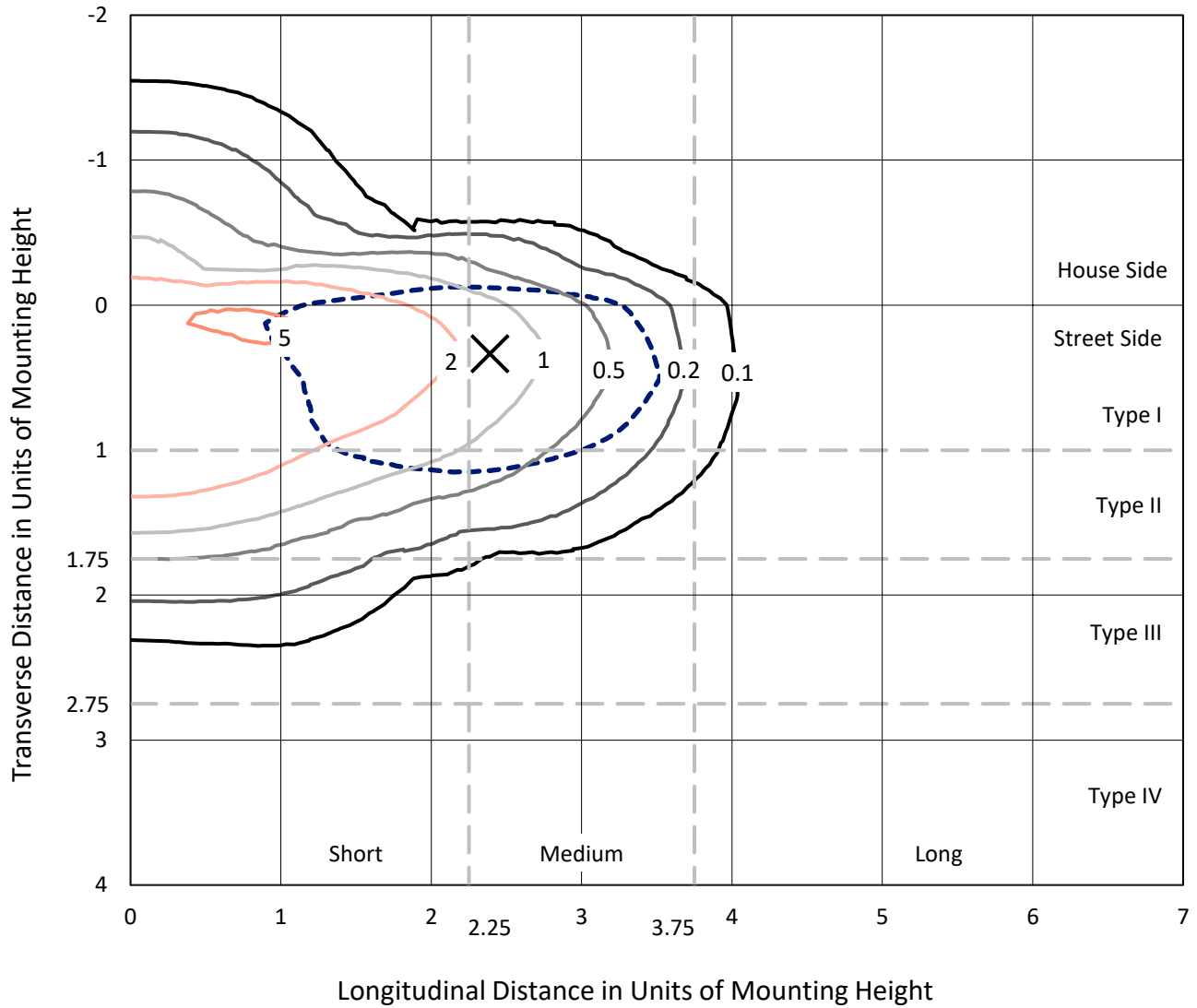
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

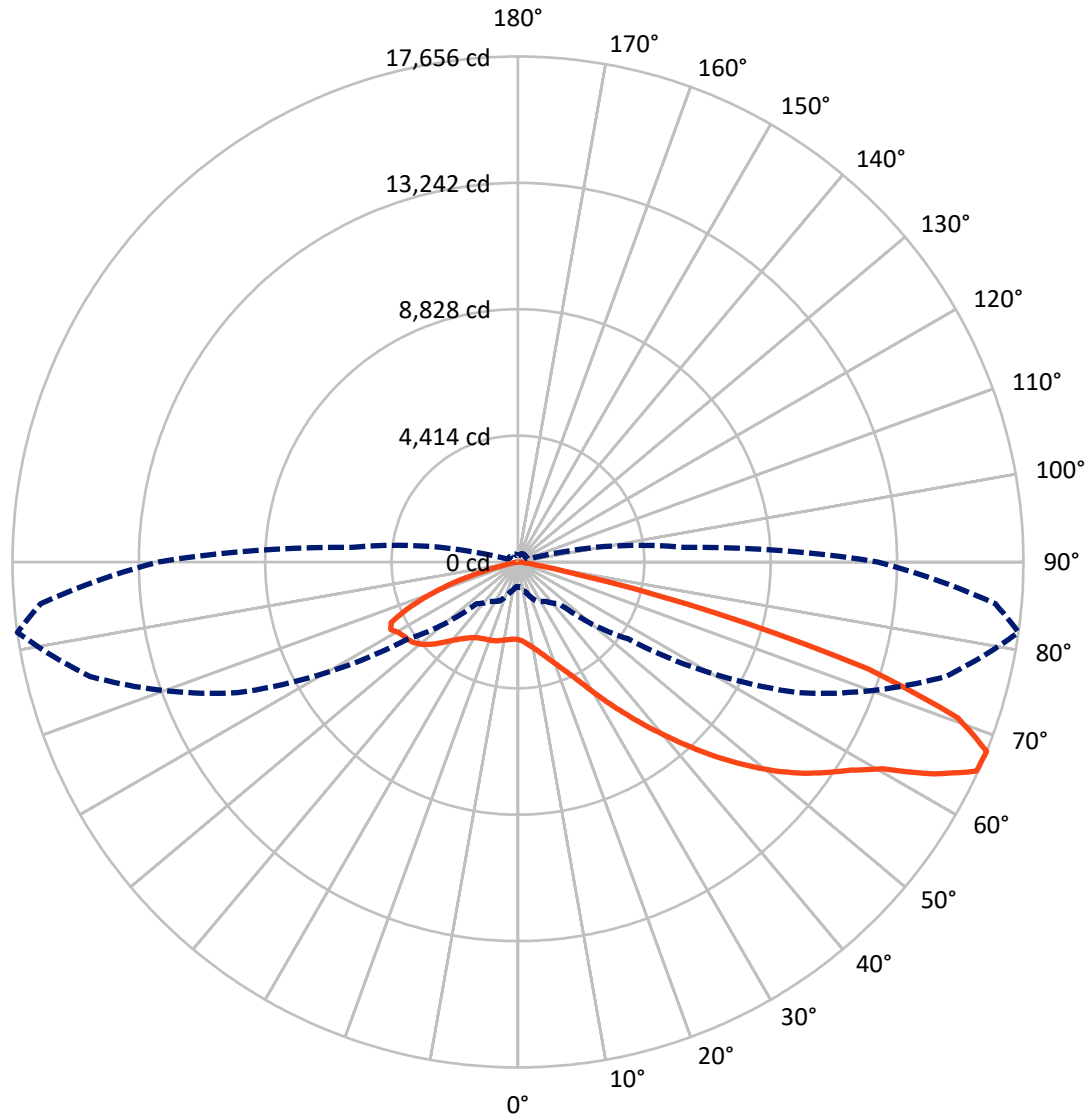
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2963.8	0.0	2963.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	13398.2	0.0	13398.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	16362.0	0.0	16362.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.5	1.5
10°-20°	627.6	3.8
20°-30°	1005.1	6.1
30°-40°	1777.4	10.9
40°-50°	3114.2	19.0
50°-60°	4153.4	25.4
60°-70°	3866.6	23.6
70°-80°	1484.0	9.1
80°-90°	92.2	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°	16362.0	100.0
0°-180°	16362.0	100.0

Coefficient of Utilization



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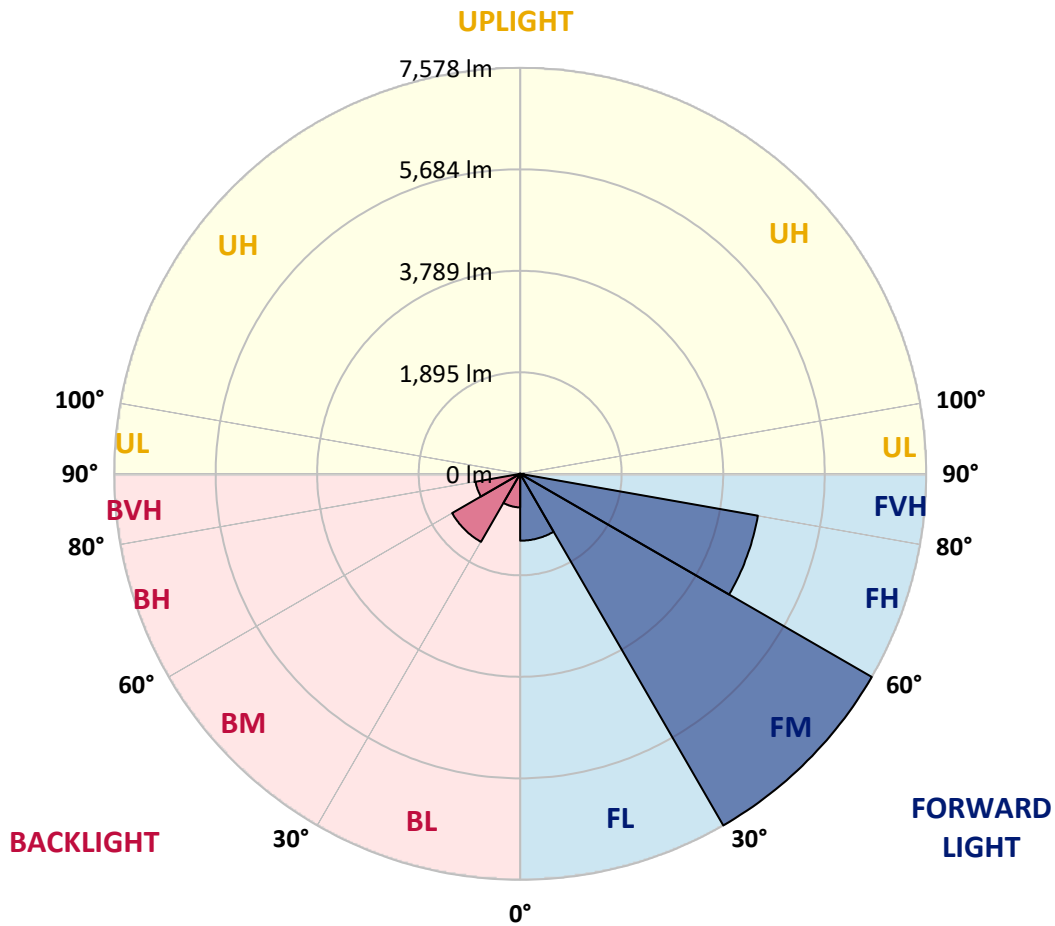
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1248.2	7.6			
FM (30°-60°)	7578.2	46.3			
FH (60°-80°)	4504.7	27.5			G2/5000
FVH (80°-90°)	67.0	0.4			G1/100
BL (0°-30°)	626.0	3.8	B2/1000		
BM (30°-60°)	1466.8	9.0	B2/2500		
BH (60°-80°)	845.9	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6
2.5°	2865.0	2881.4	2872.0	2867.3	2859.1	2847.3	2837.9	2808.4	2777.8	2757.8	2750.7
5°	2922.7	2939.2	2938.0	2942.7	2948.6	2952.1	2949.8	2916.8	2873.2	2839.0	2819.0
7.5°	2873.2	2892.0	2907.4	2930.9	2972.2	3015.7	3036.9	3029.9	2985.1	2938.0	2913.2
10°	2733.0	2753.0	2789.6	2844.9	2932.1	3026.3	3105.3	3141.8	3113.5	3061.7	3027.5
12.5°	2476.2	2496.2	2568.1	2688.2	2834.3	2998.1	3148.9	3246.6	3253.7	3201.9	3161.8
15°	2187.6	2207.6	2284.2	2435.0	2657.6	2920.3	3172.4	3357.4	3419.8	3375.0	3326.7
17.5°	2008.5	2026.2	2083.9	2205.3	2437.3	2764.8	3164.2	3475.2	3617.7	3582.4	3524.6
20°	1954.3	1969.7	1996.7	2081.6	2274.8	2603.4	3110.0	3585.9	3830.9	3810.9	3746.1
22.5°	2012.1	2026.2	2034.4	2072.1	2193.5	2497.4	3041.7	3699.0	4078.3	4080.7	4001.7
25°	2145.2	2159.3	2149.9	2173.5	2226.5	2464.4	3015.7	3832.1	4389.3	4415.2	4325.7
27.5°	2364.3	2365.5	2343.1	2341.9	2350.2	2513.9	3042.8	3974.6	4781.6	4829.9	4719.2
30°	2803.7	2786.0	2700.0	2607.0	2564.6	2662.3	3118.2	4143.1	5244.6	5330.6	5191.5
32.5°	3481.1	3455.1	3297.3	3074.6	2850.8	2901.5	3253.7	4335.1	5748.7	5904.2	5734.6
35°	4216.1	4209.1	4044.2	3713.1	3322.0	3241.9	3474.0	4587.2	6298.9	6546.3	6344.8
37.5°	4899.4	4895.9	4801.6	4411.7	3935.8	3716.7	3827.4	4917.1	6887.9	7246.0	7008.1
40°	5523.7	5534.3	5440.1	5091.4	4612.0	4325.7	4308.0	5324.7	7542.9	8008.2	7725.5
42.5°	6063.3	6075.1	5979.6	5721.7	5279.9	4999.5	4898.2	5824.1	8182.5	8826.9	8492.4
45°	6429.6	6502.7	6488.5	6282.4	5965.5	5674.5	5607.4	6450.9	8911.7	9695.1	9302.8
47.5°	6533.3	6600.5	6706.5	6734.8	6541.6	6255.3	6335.4	7206.0	9649.2	10564.5	10118.0
50°	6277.7	6340.1	6560.4	6853.7	6988.0	6899.7	7043.4	8015.3	10404.3	11431.5	10917.9
52.5°	5773.5	5837.1	6115.1	6579.3	7127.0	7405.0	7753.7	8812.8	11135.8	12252.6	11675.4
55°	5044.3	5111.4	5468.4	5993.8	6862.0	7613.6	8346.3	9609.1	11806.1	12991.2	12358.6
57.5°	4052.4	4101.9	4473.0	5208.0	6195.2	7406.2	8783.3	10478.5	12437.6	13716.9	13036.0
60°	2641.1	2684.7	3115.9	3935.8	5090.2	6713.6	8870.5	11448.0	13276.3	14660.5	13949.0
62.5°	1756.4	1785.9	2041.5	2643.5	3584.7	5383.6	8360.4	12222.0	14506.2	16302.7	15514.6
65°	1205.1	1234.6	1490.2	1909.6	2316.0	3561.2	6893.8	12119.5	15620.6	17606.7	16674.9
67.5°	860.0	884.7	1101.5	1497.3	1676.3	2068.6	4673.2	10809.5	15460.4	17656.2	16737.3
70°	616.1	630.2	809.3	1166.2	1332.3	1242.8	2598.7	8267.4	13536.7	16303.8	15462.7
72.5°	431.2	435.9	561.9	888.2	1073.2	907.1	1236.9	5512.0	10238.2	12796.9	11987.6
75°	292.1	298.0	378.1	651.4	861.1	692.7	655.0	2955.7	6010.3	7083.4	6349.5
77.5°	179.1	181.4	243.9	445.3	644.4	527.8	421.7	1252.2	2325.4	2283.0	1946.1
80°	101.3	101.3	155.5	276.8	439.4	340.4	295.7	532.5	736.3	646.7	570.2
82.5°	56.5	57.7	113.1	172.0	291.0	201.4	162.6	246.2	318.1	281.5	245.0
85°	23.6	25.9	69.5	81.3	139.0	100.1	66.0	103.7	117.8	104.8	76.6
87.5°	2.4	3.5	21.2	15.3	16.5	20.0	9.4	20.0	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6	2710.6
2.5°	2728.3	2710.6	2665.9	2614.0	2545.7	2512.7	2468.0	2437.3	2411.4	2413.8	2390.2
5°	2781.3	2736.5	2636.4	2511.5	2356.0	2245.3	2127.5	2046.2	1980.3	1966.1	1934.3
7.5°	2854.3	2783.7	2608.1	2383.1	2120.4	1921.4	1743.5	1629.2	1547.9	1522.0	1496.1
10°	2948.6	2846.1	2571.6	2221.8	1843.6	1590.3	1399.5	1310.0	1254.6	1235.7	1221.6
12.5°	3058.1	2918.0	2523.3	2025.0	1558.5	1314.7	1193.3	1148.6	1130.9	1125.0	1121.5
15°	3196.0	3007.5	2450.3	1791.8	1317.0	1146.2	1094.4	1088.5	1090.8	1088.5	1087.3
17.5°	3359.7	3105.3	2331.3	1551.5	1154.5	1060.2	1041.4	1046.1	1052.0	1050.8	1048.4
20°	3538.8	3201.9	2179.3	1338.2	1043.7	999.0	988.4	993.1	997.8	995.4	994.3
22.5°	3742.6	3305.5	2010.9	1172.1	969.5	942.4	930.6	931.8	931.8	927.1	924.7
25°	3986.4	3419.8	1834.2	1054.3	913.0	891.8	877.6	872.9	865.8	851.7	849.4
27.5°	4277.4	3541.1	1664.5	971.9	868.2	848.2	831.7	819.9	802.2	778.7	776.3
30°	4604.9	3688.4	1520.8	920.0	832.9	812.8	794.0	776.3	750.4	720.9	718.6
32.5°	4990.1	3846.2	1416.0	885.9	801.1	779.9	757.5	736.3	708.0	678.5	679.7
35°	5449.5	4037.1	1354.7	862.3	776.3	748.0	723.3	699.7	678.5	652.6	650.3
37.5°	5947.8	4239.7	1335.9	850.5	759.8	716.2	688.0	671.5	669.1	653.8	652.6
40°	6493.3	4480.0	1350.0	843.5	742.2	685.6	655.0	651.4	657.3	630.2	631.4
42.5°	7070.5	4765.1	1373.6	835.2	717.4	655.0	625.5	625.5	620.8	583.1	583.1
45°	7694.8	5093.8	1397.1	815.2	688.0	624.4	602.0	593.7	573.7	537.2	536.0
47.5°	8323.9	5428.3	1414.8	778.7	652.6	598.4	578.4	559.6	530.1	497.1	495.9
50°	8921.2	5728.7	1396.0	724.5	612.6	573.7	552.5	526.6	494.8	472.4	468.9
52.5°	9454.8	5989.1	1315.9	660.9	570.2	547.8	528.9	501.8	475.9	452.4	450.0
55°	9918.9	6199.9	1174.5	600.8	532.5	525.4	506.5	472.4	437.0	417.0	414.7
57.5°	10364.2	6360.1	997.8	551.3	498.3	500.7	472.4	441.8	408.8	387.6	385.2
60°	10956.8	6574.5	818.7	505.4	461.8	468.9	438.2	415.8	374.6	347.5	344.0
62.5°	11903.9	6907.9	650.3	448.8	419.4	421.7	408.8	381.7	332.2	300.4	298.0
65°	12655.5	6785.4	512.4	387.6	371.1	374.6	374.6	345.2	292.1	255.6	252.1
67.5°	12570.7	5810.0	408.8	327.5	325.1	327.5	335.7	311.0	259.2	229.7	225.0
70°	11580.0	4621.4	327.5	272.1	282.7	276.8	300.4	283.9	233.2	203.8	200.3
72.5°	9448.9	3329.1	249.7	225.0	216.8	226.2	270.9	255.6	194.4	161.4	157.9
75°	5521.4	1776.5	186.1	177.9	156.7	188.5	240.3	217.9	148.4	119.0	115.4
77.5°	1797.7	619.6	136.7	130.8	116.6	152.0	205.0	183.8	121.3	94.2	90.7
80°	481.8	187.3	93.1	86.0	75.4	113.1	162.6	146.1	87.2	61.3	60.1
82.5°	193.2	78.9	54.2	48.3	41.2	77.7	128.4	117.8	64.8	38.9	38.9
85°	62.4	25.9	20.0	15.3	18.8	48.3	76.6	80.1	45.9	20.0	15.3
87.5°	8.2	3.5	3.5	4.7	3.5	8.2	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)