

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: P884656

Luminaire Tested: **NAV-SB5C-827-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884656
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-SB5C-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA 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: 22547 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

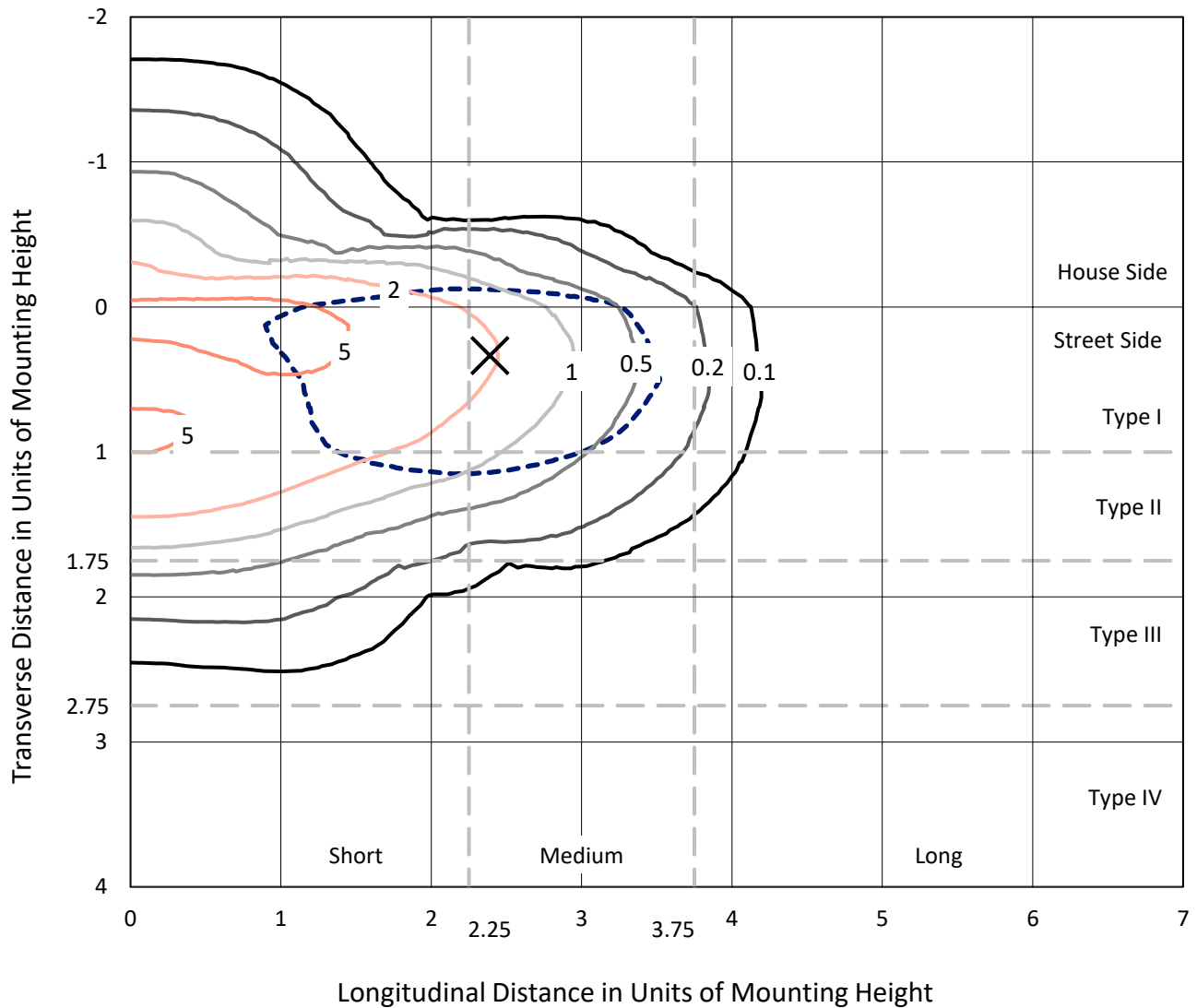
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

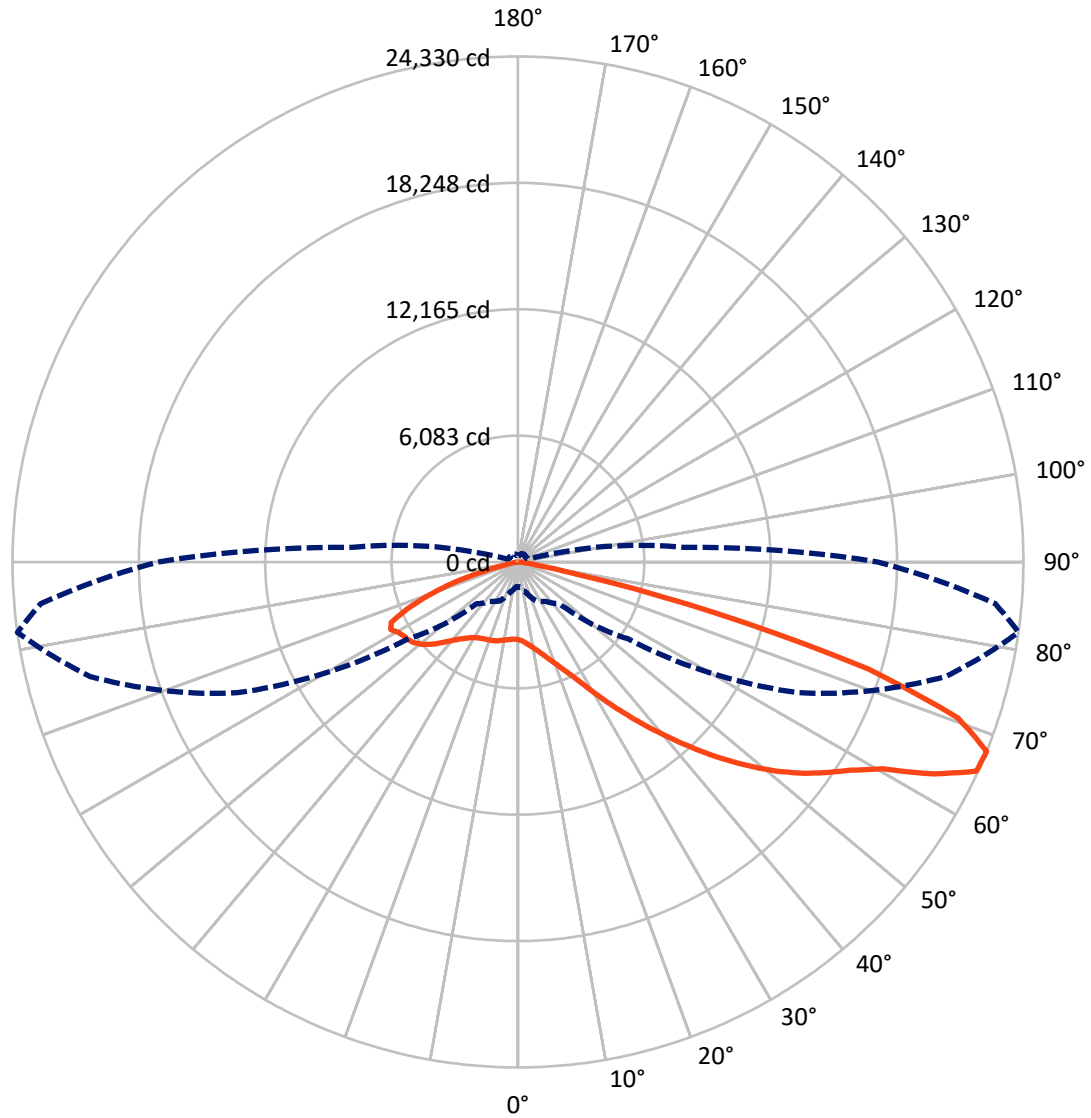
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 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	4084.2	0.0	4084.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	18462.8	0.0	18462.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	22547.0	0.0	22547.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.8	1.5
10°-20°	864.8	3.8
20°-30°	1385.1	6.1
30°-40°	2449.3	10.9
40°-50°	4291.4	19.0
50°-60°	5723.5	25.4
60°-70°	5328.3	23.6
70°-80°	2045.0	9.1
80°-90°	127.0	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°	22547.0	100.0
0°-180°	22547.0	100.0

Coefficient of Utilization



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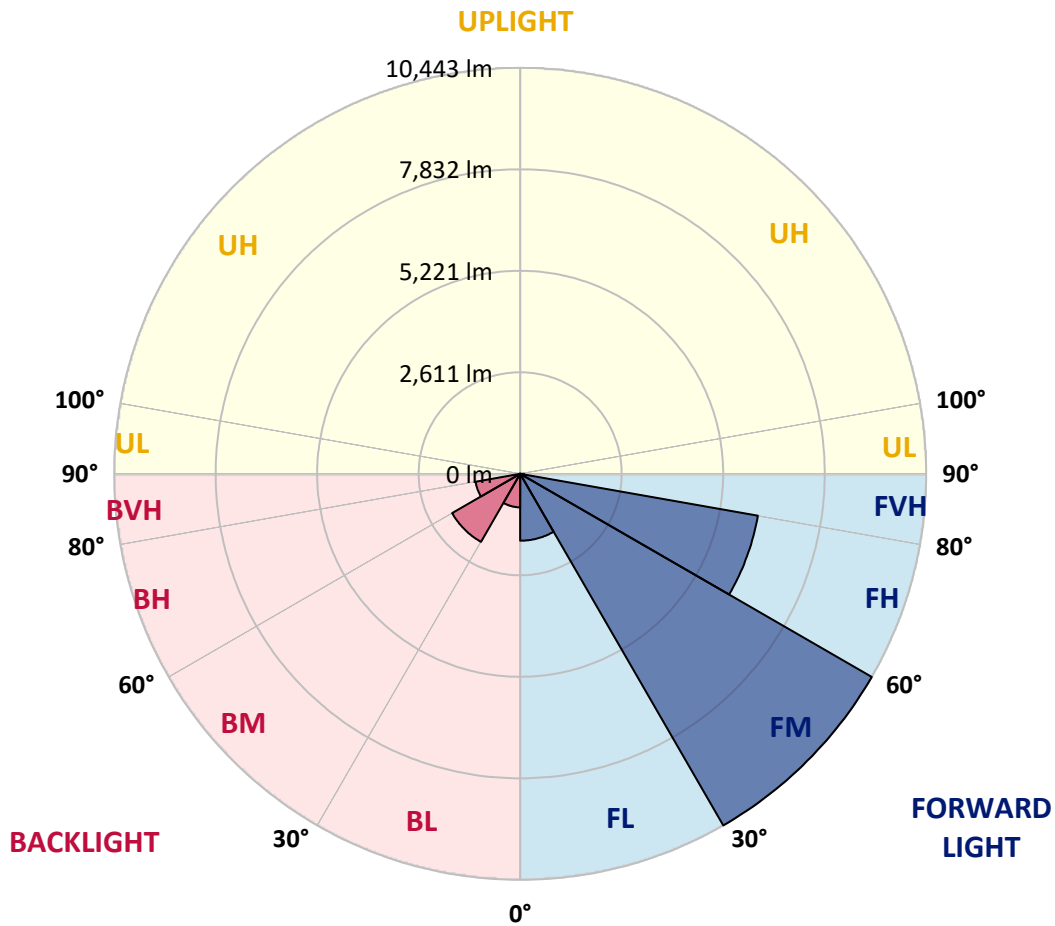
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1720.1	7.6			
FM (30°-60°)	10442.9	46.3			
FH (60°-80°)	6207.5	27.5			G3/7500
FVH (80°-90°)	92.3	0.4			G1/100
BL (0°-30°)	862.6	3.8	B2/1000		
BM (30°-60°)	2021.2	9.0	B2/2500		
BH (60°-80°)	1165.7	5.2	B3/2500		G3/2500
BVH (80°-90°)	34.7	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3
2.5°	3947.9	3970.7	3957.7	3951.2	3939.8	3923.6	3910.6	3870.0	3827.8	3800.2	3790.5
5°	4027.5	4050.2	4048.6	4055.1	4063.2	4068.1	4064.8	4019.4	3959.3	3912.2	3884.6
7.5°	3959.3	3985.3	4006.4	4038.8	4095.7	4155.7	4184.9	4175.2	4113.5	4048.6	4014.5
10°	3766.1	3793.7	3844.0	3920.3	4040.5	4170.3	4279.1	4329.4	4290.5	4219.0	4171.9
12.5°	3412.2	3439.8	3538.9	3704.4	3905.7	4131.4	4339.2	4473.9	4483.6	4412.2	4357.0
15°	3014.5	3042.1	3147.6	3355.4	3662.2	4024.2	4371.6	4626.5	4712.5	4650.8	4584.3
17.5°	2767.8	2792.1	2871.7	3038.9	3358.7	3809.9	4360.3	4788.8	4985.2	4936.5	4857.0
20°	2693.1	2714.2	2751.5	2868.4	3134.6	3587.6	4285.6	4941.4	5279.1	5251.5	5162.2
22.5°	2772.6	2792.1	2803.5	2855.4	3022.6	3441.5	4191.4	5097.2	5620.0	5623.2	5514.4
25°	2956.1	2975.6	2962.6	2995.0	3068.1	3396.0	4155.7	5280.7	6048.5	6084.2	5960.9
27.5°	3258.0	3259.6	3228.8	3227.2	3238.5	3464.2	4193.1	5477.1	6589.1	6655.6	6503.0
30°	3863.5	3839.2	3720.7	3592.4	3534.0	3668.7	4296.9	5709.2	7227.1	7345.6	7154.0
32.5°	4796.9	4761.2	4543.7	4236.9	3928.5	3998.3	4483.6	5973.8	7921.8	8136.1	7902.4
35°	5809.9	5800.1	5572.9	5116.7	4577.8	4467.4	4787.2	6321.2	8679.9	9020.8	8743.2
37.5°	6751.4	6746.5	6616.7	6079.4	5423.5	5121.6	5274.2	6775.8	9491.6	9985.1	9657.2
40°	7611.8	7626.4	7496.5	7016.0	6355.3	5960.9	5936.5	7337.4	10394.2	11035.4	10645.8
42.5°	8355.3	8371.5	8240.0	7884.5	7275.8	6889.4	6749.8	8025.7	11275.6	12163.6	11702.6
45°	8860.1	8960.8	8941.3	8657.2	8220.5	7819.6	7727.0	8889.3	12280.5	13360.0	12819.4
47.5°	9003.0	9095.5	9241.6	9280.6	9014.3	8619.9	8730.3	9929.9	13296.7	14558.0	13942.8
50°	8650.7	8736.7	9040.3	9444.5	9629.6	9507.8	9705.9	11045.1	14337.2	15752.8	15045.0
52.5°	7955.9	8043.6	8426.7	9066.3	9821.1	10204.2	10684.7	12144.1	15345.3	16884.2	16088.8
55°	6951.1	7043.6	7535.5	8259.5	9455.9	10491.6	11501.3	13241.5	16269.0	17902.0	17030.3
57.5°	5584.2	5652.4	6163.8	7176.7	8537.1	10205.9	12103.5	14439.5	17139.1	18902.0	17963.7
60°	3639.5	3699.6	4293.7	5423.5	7014.4	9251.3	12223.7	15775.5	18294.9	20202.3	19221.8
62.5°	2420.4	2461.0	2813.2	3642.7	4939.8	7418.6	11520.8	16842.0	19989.6	22465.2	21379.2
65°	1660.7	1701.2	2053.5	2631.4	3191.5	4907.3	9499.7	16700.8	21525.3	24262.2	22978.2
67.5°	1185.0	1219.1	1517.8	2063.2	2310.0	2850.6	6439.7	14895.6	21304.5	24330.4	23064.2
70°	849.0	868.5	1115.2	1607.1	1836.0	1712.6	3581.1	11392.5	18653.6	22466.8	21307.8
72.5°	594.1	600.6	774.3	1224.0	1478.9	1250.0	1704.5	7595.5	14108.3	17634.2	16519.0
75°	402.6	410.7	521.1	897.7	1186.7	954.5	902.6	4072.9	8282.2	9761.1	8749.7
77.5°	246.7	250.0	336.0	613.6	888.0	727.3	581.2	1725.6	3204.4	3146.0	2681.7
80°	139.6	139.6	214.3	381.5	605.5	469.1	407.5	733.7	1014.6	891.2	785.7
82.5°	77.9	79.5	155.8	237.0	401.0	277.6	224.0	339.3	438.3	388.0	337.7
85°	32.5	35.7	95.8	112.0	191.6	138.0	90.9	142.9	162.3	144.5	105.5
87.5°	3.2	4.9	29.2	21.1	22.7	27.6	13.0	27.6	22.7	22.7	16.2
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°	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3
2.5°	3759.6	3735.3	3673.6	3602.2	3508.0	3462.6	3400.9	3358.7	3322.9	3326.2	3293.7
5°	3832.7	3771.0	3633.0	3460.9	3246.7	3094.1	2931.7	2819.7	2728.8	2709.3	2665.5
7.5°	3933.3	3835.9	3594.0	3284.0	2922.0	2647.6	2402.5	2245.1	2133.1	2097.3	2061.6
10°	4063.2	3922.0	3543.7	3061.6	2540.5	2191.5	1928.5	1805.1	1728.8	1702.9	1683.4
12.5°	4214.2	4021.0	3477.2	2790.5	2147.7	1811.6	1644.4	1582.7	1558.4	1550.3	1545.4
15°	4404.1	4144.4	3376.5	2469.1	1814.9	1579.5	1508.1	1500.0	1503.2	1500.0	1498.3
17.5°	4629.7	4279.1	3212.6	2137.9	1590.9	1461.0	1435.0	1441.5	1449.6	1448.0	1444.8
20°	4876.5	4412.2	3003.2	1844.1	1438.3	1376.6	1362.0	1368.5	1375.0	1371.7	1370.1
22.5°	5157.3	4555.1	2771.0	1615.2	1336.0	1298.7	1282.4	1284.1	1284.1	1277.6	1274.3
25°	5493.3	4712.5	2527.5	1452.9	1258.1	1228.9	1209.4	1202.9	1193.1	1173.7	1170.4
27.5°	5894.3	4879.7	2293.8	1339.2	1196.4	1168.8	1146.1	1129.8	1105.5	1073.0	1069.8
30°	6345.6	5082.6	2095.7	1267.8	1147.7	1120.1	1094.1	1069.8	1034.1	993.5	990.2
32.5°	6876.4	5300.2	1951.2	1220.7	1103.9	1074.6	1043.8	1014.6	975.6	935.0	936.7
35°	7509.5	5563.1	1866.8	1188.3	1069.8	1030.8	996.7	964.3	935.0	899.3	896.1
37.5°	8196.2	5842.4	1840.9	1172.0	1047.0	987.0	948.0	925.3	922.0	900.9	899.3
40°	8947.8	6173.5	1860.3	1162.3	1022.7	944.8	902.6	897.7	905.8	868.5	870.1
42.5°	9743.2	6566.4	1892.8	1150.9	988.6	902.6	862.0	862.0	855.5	803.5	803.5
45°	10603.6	7019.3	1925.3	1123.3	948.0	860.4	829.5	818.2	790.6	740.2	738.6
47.5°	11470.4	7480.3	1949.6	1073.0	899.3	824.6	797.1	771.1	730.5	685.0	683.4
50°	12293.5	7894.2	1923.6	998.3	844.1	790.6	761.3	725.6	681.8	651.0	646.1
52.5°	13028.8	8253.0	1813.3	910.7	785.7	754.8	728.9	691.5	655.8	623.4	620.1
55°	13668.4	8543.6	1618.5	827.9	733.7	724.0	698.0	651.0	602.3	574.7	571.4
57.5°	14282.0	8764.3	1375.0	759.7	686.7	689.9	651.0	608.7	563.3	534.1	530.8
60°	15098.6	9059.8	1128.2	696.4	636.3	646.1	603.9	573.0	516.2	478.9	474.0
62.5°	16403.7	9519.2	896.1	618.5	577.9	581.2	563.3	526.0	457.8	413.9	410.7
65°	17439.4	9350.4	706.1	534.1	511.3	516.2	516.2	475.6	402.6	352.3	347.4
67.5°	17322.5	8006.2	563.3	451.3	448.0	451.3	462.6	428.6	357.1	316.5	310.1
70°	15957.3	6368.3	451.3	375.0	389.6	381.5	413.9	391.2	321.4	280.8	276.0
72.5°	13020.7	4587.5	344.1	310.1	298.7	311.7	373.4	352.3	267.8	222.4	217.5
75°	7608.5	2448.0	256.5	245.1	215.9	259.7	331.2	300.3	204.5	164.0	159.1
77.5°	2477.2	853.9	188.3	180.2	160.7	209.4	282.5	253.2	167.2	129.9	125.0
80°	663.9	258.1	128.2	118.5	103.9	155.8	224.0	201.3	120.1	84.4	82.8
82.5°	266.2	108.8	74.7	66.6	56.8	107.1	176.9	162.3	89.3	53.6	53.6
85°	86.0	35.7	27.6	21.1	26.0	66.6	105.5	110.4	63.3	27.6	21.1
87.5°	11.4	4.9	4.9	6.5	4.9	11.4	32.5	30.8	17.9	3.2	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)