

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: P884586

Luminaire Tested: **NAV-SB5C-722-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884586
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-722-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 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: 22113 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

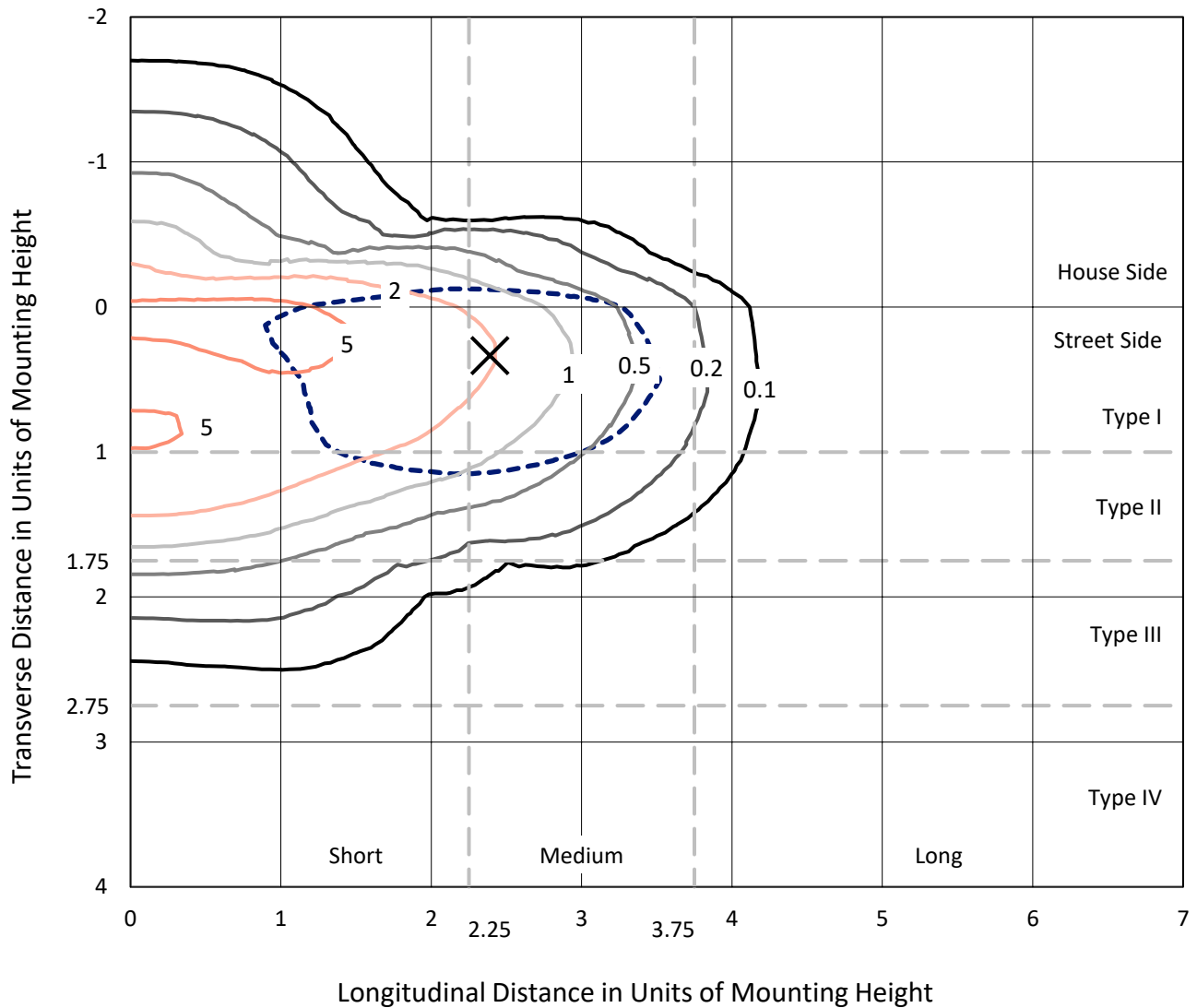
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

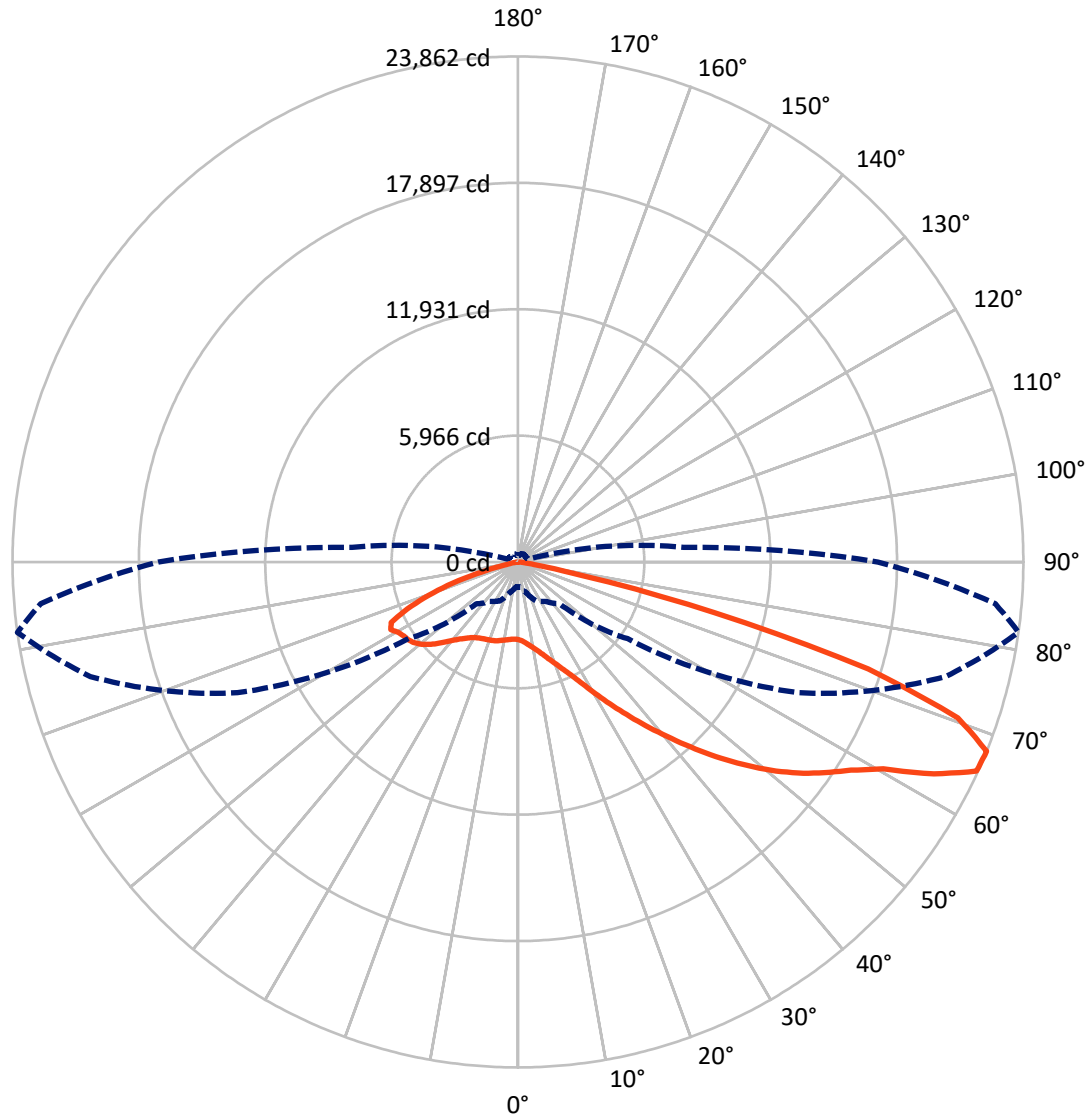
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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	4005.6	0.0	4005.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	18107.4	0.0	18107.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	22113.0	0.0	22113.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.4	1.5
10°-20°	848.1	3.8
20°-30°	1358.4	6.1
30°-40°	2402.1	10.9
40°-50°	4208.8	19.0
50°-60°	5613.3	25.4
60°-70°	5225.7	23.6
70°-80°	2005.6	9.1
80°-90°	124.6	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°	22113.0	100.0
0°-180°	22113.0	100.0

Coefficient of Utilization



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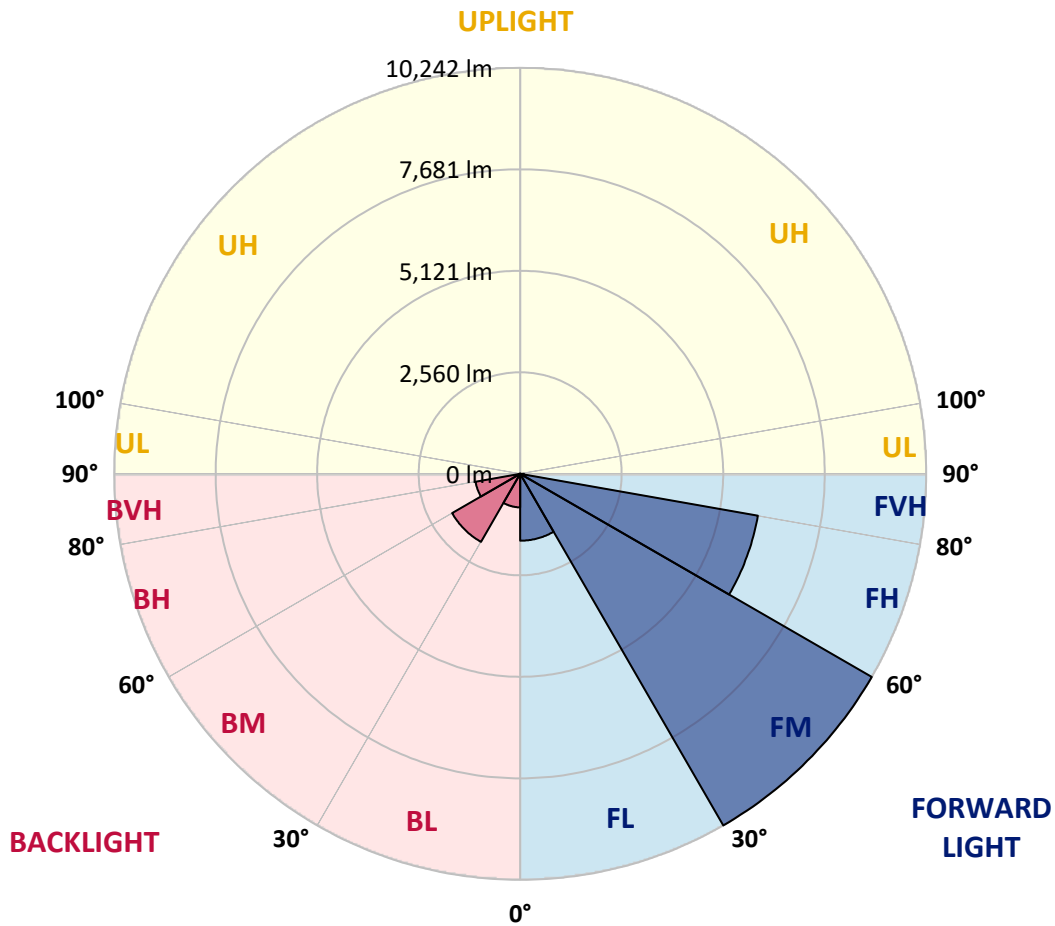
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1687.0	7.6			
FM (30°-60°)	10241.8	46.3			
FH (60°-80°)	6088.0	27.5			G3/7500
FVH (80°-90°)	90.6	0.4			G1/100
BL (0°-30°)	846.0	3.8	B2/1000		
BM (30°-60°)	1982.3	9.0	B2/2500		
BH (60°-80°)	1143.3	5.2	B3/2500		G3/2500
BVH (80°-90°)	34.0	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°	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4
2.5°	3871.9	3894.2	3881.5	3875.1	3864.0	3848.1	3835.3	3795.5	3754.1	3727.1	3717.5
5°	3950.0	3972.2	3970.6	3977.0	3985.0	3989.8	3986.6	3942.0	3883.1	3836.9	3809.8
7.5°	3883.1	3908.6	3929.3	3961.1	4016.8	4075.7	4104.4	4094.8	4034.3	3970.6	3937.2
10°	3693.6	3720.7	3770.0	3844.9	3962.7	4090.1	4196.7	4246.1	4207.9	4137.8	4091.6
12.5°	3346.6	3373.6	3470.7	3633.1	3830.5	4051.8	4255.6	4387.8	4397.3	4327.3	4273.1
15°	2956.5	2983.6	3087.0	3290.8	3591.7	3946.8	4287.5	4537.4	4621.8	4561.3	4496.0
17.5°	2714.5	2738.4	2816.4	2980.4	3294.0	3736.6	4276.3	4696.6	4889.3	4841.5	4763.5
20°	2641.3	2662.0	2698.6	2813.2	3074.3	3518.5	4203.1	4846.3	5177.4	5150.4	5062.8
22.5°	2719.3	2738.4	2749.5	2800.5	2964.5	3375.2	4110.8	4999.1	5511.8	5515.0	5408.3
25°	2899.2	2918.3	2905.5	2937.4	3009.0	3330.6	4075.7	5179.0	5932.1	5967.1	5846.1
27.5°	3195.3	3196.9	3166.6	3165.1	3176.2	3397.5	4112.3	5371.7	6462.3	6527.5	6377.9
30°	3789.2	3765.3	3649.0	3523.3	3466.0	3598.1	4214.2	5599.3	7087.9	7204.2	7016.3
32.5°	4704.6	4669.6	4456.2	4155.3	3852.8	3921.3	4397.3	5858.9	7769.3	7979.5	7750.2
35°	5698.1	5688.5	5465.6	5018.2	4489.7	4381.4	4695.0	6199.6	8512.9	8847.2	8574.9
37.5°	6621.5	6616.7	6489.3	5962.3	5319.1	5023.0	5172.7	6645.3	9308.9	9792.9	9471.3
40°	7465.3	7479.6	7352.2	6881.0	6233.0	5846.1	5822.2	7196.2	10194.1	10823.0	10440.9
42.5°	8194.4	8210.4	8081.4	7732.7	7135.7	6756.8	6619.9	7871.2	11058.6	11929.5	11477.3
45°	8689.6	8788.3	8769.2	8490.6	8062.3	7669.0	7578.3	8718.2	12044.1	13102.8	12572.7
47.5°	8829.7	8920.4	9063.7	9101.9	8840.8	8453.9	8562.2	9738.8	13040.7	14277.8	13674.4
50°	8484.2	8568.6	8866.3	9262.7	9444.2	9324.8	9519.0	10832.5	14061.2	15449.5	14755.4
52.5°	7802.8	7888.8	8264.5	8891.8	9632.1	10007.8	10479.1	11910.3	15049.9	16559.2	15779.1
55°	6817.3	6908.0	7390.4	8100.5	9273.9	10289.6	11279.9	12986.6	15955.8	17557.5	16702.5
57.5°	5476.8	5543.6	6045.1	7038.6	8372.7	10009.4	11870.5	14161.6	16809.2	18538.2	17618.0
60°	3569.4	3628.4	4211.1	5319.1	6879.4	9073.3	11988.4	15471.8	17942.7	19813.4	18851.8
62.5°	2373.8	2413.6	2759.1	3572.6	4844.7	7275.8	11299.0	16517.8	19604.9	22032.8	20967.7
65°	1628.7	1668.5	2014.0	2580.8	3130.0	4812.9	9316.9	16379.3	21111.0	23795.2	22535.9
67.5°	1162.2	1195.7	1488.6	2023.5	2265.5	2795.7	6315.8	14608.9	20894.5	23862.1	22620.3
70°	832.7	851.8	1093.8	1576.2	1800.6	1679.6	3512.1	11173.2	18294.6	22034.4	20897.6
72.5°	582.7	589.1	759.4	1200.4	1450.4	1225.9	1671.7	7449.3	13836.8	17294.8	16201.0
75°	394.8	402.8	511.1	880.4	1163.8	936.1	885.2	3994.5	8122.8	9573.2	8581.3
77.5°	242.0	245.2	329.6	601.8	870.9	713.3	570.0	1692.4	3142.8	3085.5	2630.1
80°	136.9	136.9	210.2	374.1	593.8	460.1	399.6	719.6	995.0	874.1	770.6
82.5°	76.4	78.0	152.8	232.4	393.2	272.2	219.7	332.7	429.9	380.5	331.2
85°	31.8	35.0	93.9	109.9	187.9	135.3	89.2	140.1	159.2	141.7	103.5
87.5°	3.2	4.8	28.7	20.7	22.3	27.1	12.7	27.1	22.3	22.3	15.9
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°	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4	3663.4
2.5°	3687.3	3663.4	3602.9	3532.8	3440.5	3395.9	3335.4	3294.0	3259.0	3262.2	3230.3
5°	3758.9	3698.4	3563.1	3394.3	3184.2	3034.5	2875.3	2765.4	2676.3	2657.2	2614.2
7.5°	3857.6	3762.1	3524.9	3220.8	2865.7	2596.7	2356.3	2201.8	2092.0	2057.0	2021.9
10°	3985.0	3846.5	3475.5	3002.7	2491.6	2149.3	1891.4	1770.4	1695.6	1670.1	1651.0
12.5°	4133.0	3943.6	3410.2	2736.8	2106.3	1776.8	1612.8	1552.3	1528.4	1520.4	1515.7
15°	4319.3	4064.6	3311.5	2421.6	1779.9	1549.1	1479.0	1471.1	1474.3	1471.1	1469.5
17.5°	4540.6	4196.7	3150.7	2096.8	1560.2	1432.9	1407.4	1413.8	1421.7	1420.1	1417.0
20°	4782.6	4327.3	2945.3	1808.6	1410.6	1350.1	1335.8	1342.1	1348.5	1345.3	1343.7
22.5°	5058.0	4467.4	2717.7	1584.1	1310.3	1273.7	1257.7	1259.3	1259.3	1253.0	1249.8
25°	5387.6	4621.8	2478.9	1424.9	1233.9	1205.2	1186.1	1179.7	1170.2	1151.1	1147.9
27.5°	5780.8	4785.8	2249.6	1313.5	1173.4	1146.3	1124.0	1108.1	1084.2	1052.4	1049.2
30°	6223.4	4984.8	2055.4	1243.4	1125.6	1098.5	1073.1	1049.2	1014.2	974.4	971.2
32.5°	6744.1	5198.1	1913.7	1197.2	1082.6	1054.0	1023.7	995.0	956.8	917.0	918.6
35°	7365.0	5456.1	1830.9	1165.4	1049.2	1011.0	977.5	945.7	917.0	882.0	878.8
37.5°	8038.4	5729.9	1805.4	1149.5	1026.9	968.0	929.8	907.5	904.3	883.6	882.0
40°	8775.5	6054.7	1824.5	1139.9	1003.0	926.6	885.2	880.4	888.4	851.8	853.4
42.5°	9555.7	6440.0	1856.4	1128.8	969.6	885.2	845.4	845.4	839.0	788.1	788.1
45°	10399.5	6884.2	1888.2	1101.7	929.8	843.8	813.6	802.4	775.3	726.0	724.4
47.5°	11249.6	7336.3	1912.1	1052.4	882.0	808.8	781.7	756.2	716.4	671.9	670.3
50°	12056.8	7742.3	1886.6	979.1	827.9	775.3	746.7	711.7	668.7	638.4	633.6
52.5°	12778.0	8094.1	1778.4	893.2	770.6	740.3	714.8	678.2	643.2	611.4	608.2
55°	13405.3	8379.1	1587.3	812.0	719.6	710.1	684.6	638.4	590.7	563.6	560.4
57.5°	14007.1	8595.6	1348.5	745.1	673.4	676.6	638.4	597.0	552.5	523.8	520.6
60°	14807.9	8885.4	1106.5	683.0	624.1	633.6	592.3	562.0	506.3	469.7	464.9
62.5°	16088.0	9336.0	878.8	606.6	566.8	570.0	552.5	515.8	449.0	406.0	402.8
65°	17103.7	9170.4	692.6	523.8	501.5	506.3	506.3	466.5	394.8	345.5	340.7
67.5°	16989.1	7852.1	552.5	442.6	439.4	442.6	453.7	420.3	350.3	310.5	304.1
70°	15650.1	6245.7	442.6	367.8	382.1	374.1	406.0	383.7	315.2	275.4	270.7
72.5°	12770.1	4499.2	337.5	304.1	292.9	305.7	366.2	345.5	262.7	218.1	213.3
75°	7462.1	2400.9	251.5	240.4	211.7	254.7	324.8	294.5	200.6	160.8	156.0
77.5°	2429.5	837.4	184.7	176.7	157.6	205.4	277.0	248.4	164.0	127.4	122.6
80°	651.2	253.1	125.8	116.2	101.9	152.8	219.7	197.4	117.8	82.8	81.2
82.5°	261.1	106.7	73.2	65.3	55.7	105.1	173.5	159.2	87.6	52.5	52.5
85°	84.4	35.0	27.1	20.7	25.5	65.3	103.5	108.3	62.1	27.1	20.7
87.5°	11.1	4.8	4.8	6.4	4.8	11.1	31.8	30.2	17.5	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)