

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: P884758

Luminaire Tested: **NAV-SB5D-722-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884758
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-SB5D-722-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 900mA 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: 32271 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

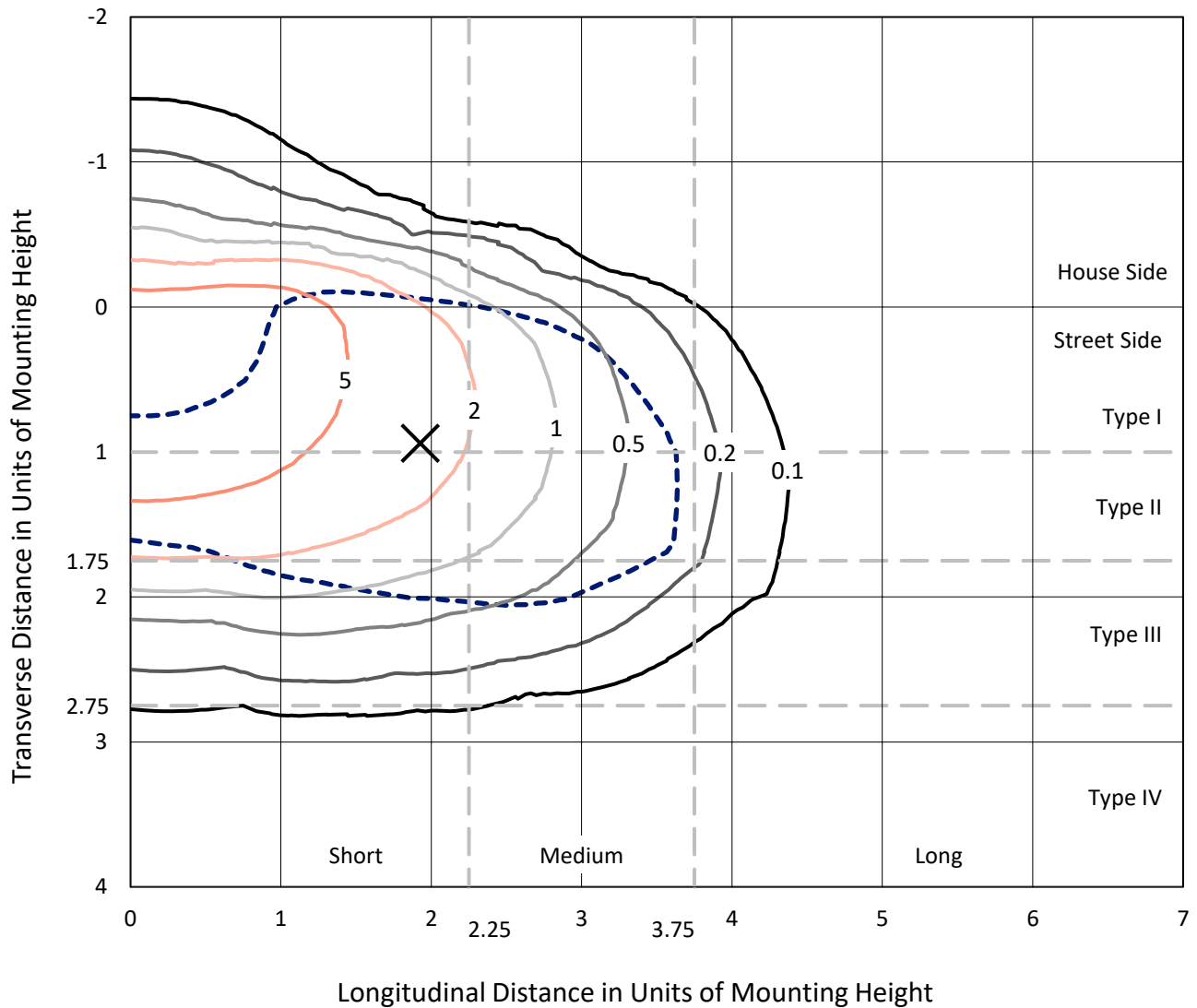
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

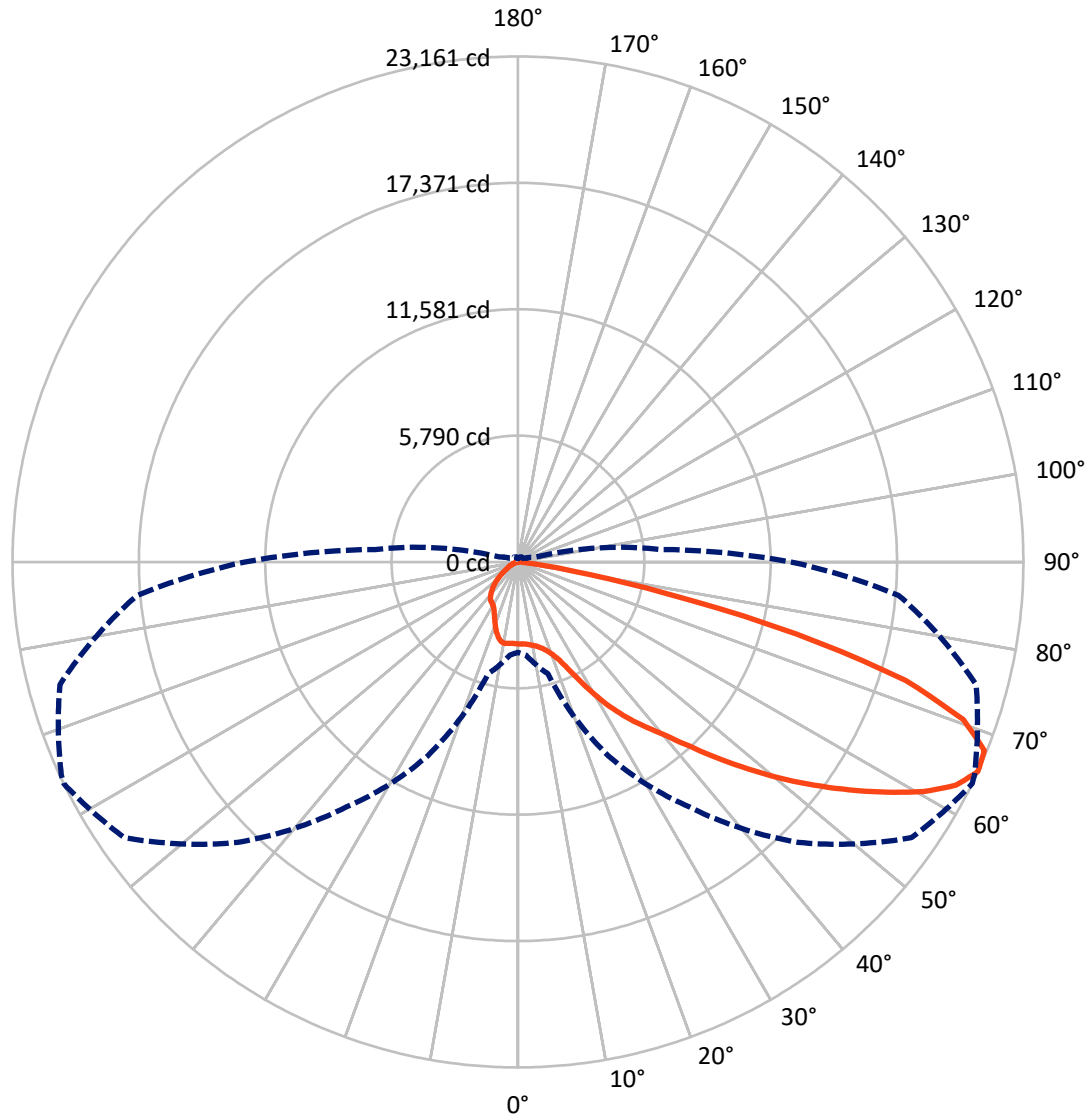
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4315.6	0.0	4315.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	27955.4	0.0	27955.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	32271.0	0.0	32271.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.3	1.1
10°-20°	939.2	2.9
20°-30°	1779.8	5.5
30°-40°	3601.5	11.2
40°-50°	6135.1	19.0
50°-60°	8343.3	25.9
60°-70°	7834.8	24.3
70°-80°	3138.9	9.7
80°-90°	152.1	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°	32271.0	100.0
0°-180°	32271.0	100.0

Coefficient of Utilization



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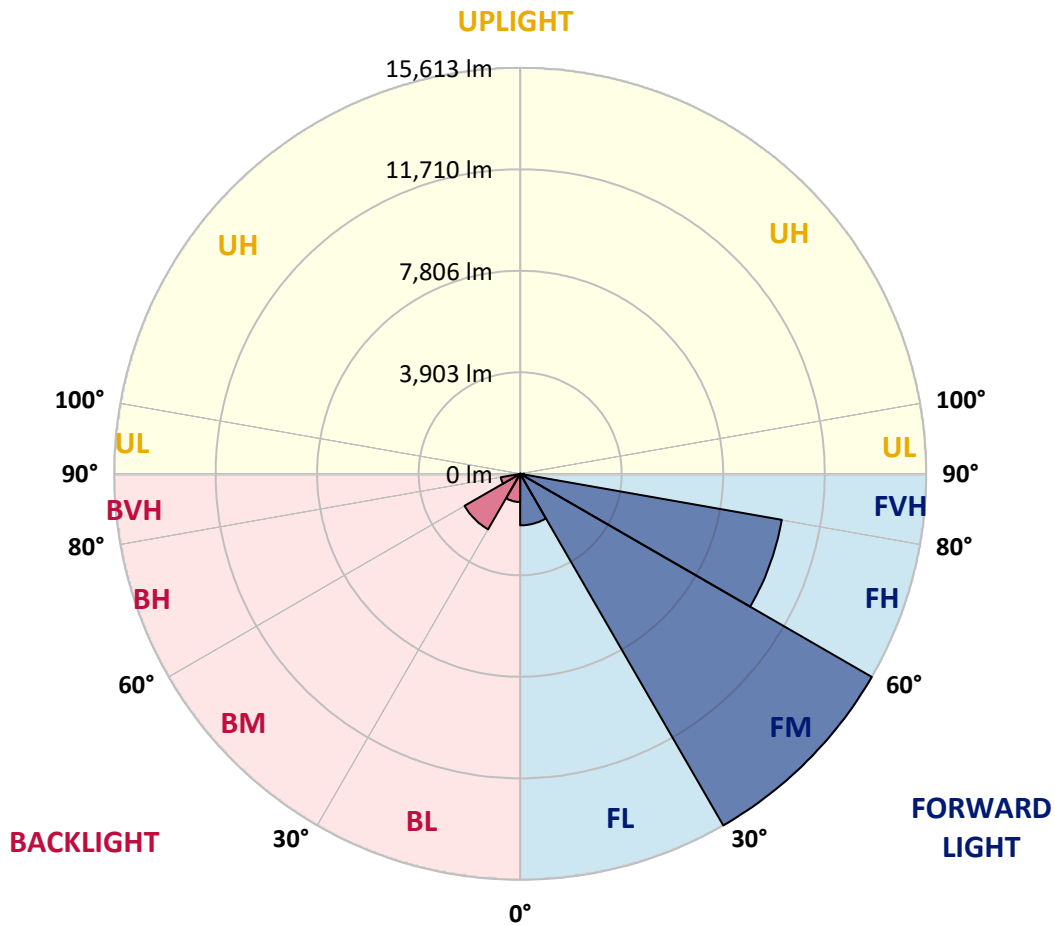
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1981.8	6.1			
FM (30°-60°)	15612.7	48.4			
FH (60°-80°)	10216.3	31.7			G4/12000
FVH (80°-90°)	144.6	0.4			G2/225
BL (0°-30°)	1083.5	3.4	B3/2500		
BM (30°-60°)	2467.2	7.6	B2/2500		
BH (60°-80°)	757.5	2.3	B2/1000		G2/1000
BVH (80°-90°)	7.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5
2.5°	3740.5	3766.4	3759.9	3753.5	3751.3	3755.6	3757.8	3755.6	3755.6	3755.6	3757.8
5°	3669.1	3690.7	3690.7	3705.9	3727.5	3753.5	3772.9	3777.2	3781.6	3788.1	3785.9
7.5°	3532.8	3550.1	3563.1	3612.8	3666.9	3736.1	3794.6	3824.8	3829.2	3853.0	3861.6
10°	3439.8	3461.4	3483.0	3535.0	3612.8	3716.7	3816.2	3889.7	3900.6	3956.8	3982.8
12.5°	3435.4	3457.1	3485.2	3541.4	3632.3	3742.6	3863.8	3969.8	3989.3	4071.5	4125.6
15°	3480.9	3506.8	3532.8	3602.0	3699.4	3833.5	3963.3	4095.3	4114.7	4231.6	4290.0
17.5°	3573.9	3608.5	3628.0	3697.2	3801.0	3950.3	4121.2	4272.7	4290.0	4426.3	4499.8
20°	3757.8	3798.9	3805.4	3861.6	3963.3	4123.4	4326.7	4515.0	4536.6	4692.4	4774.6
22.5°	4138.5	4196.9	4145.0	4173.1	4264.0	4424.1	4644.8	4882.7	4913.0	5090.4	5164.0
25°	4809.2	4891.4	4757.3	4709.7	4748.6	4915.2	5192.1	5492.8	5527.4	5670.2	5707.0
27.5°	6126.7	6020.7	5817.3	5618.3	5501.5	5596.6	5908.2	6280.3	6323.5	6462.0	6418.7
30°	7574.0	7480.9	7206.2	6764.9	6488.0	6472.8	6760.5	7175.9	7225.7	7357.6	7225.7
32.5°	9023.4	8934.7	8636.2	8093.2	7612.9	7374.9	7574.0	8034.8	8060.7	8145.1	7950.4
35°	10449.1	10358.2	10059.7	9503.7	8913.1	8372.3	8333.3	8852.5	8861.2	8949.9	8660.0
37.5°	11883.4	11807.7	11489.7	10944.5	10362.6	9616.2	9254.9	9627.0	9637.8	9724.4	9423.7
40°	12906.7	12939.1	12720.6	12298.8	11799.0	10983.4	10289.0	10451.3	10386.4	10531.3	10351.7
42.5°	13785.0	13849.9	13659.5	13447.5	13157.6	12439.4	11569.7	11541.6	11437.8	11515.6	11329.6
45°	14544.4	14598.4	14427.5	14377.8	14371.3	13867.2	12969.4	12800.7	12655.7	12640.6	12417.8
47.5°	14823.4	14927.3	15000.8	15167.4	15491.9	15279.9	14416.7	14155.0	13992.7	13873.7	13521.1
50°	14929.4	15039.8	15290.7	15775.3	16543.3	16634.2	15857.5	15563.3	15364.3	15147.9	14628.7
52.5°	14786.7	14983.5	15321.0	16136.6	17250.7	17720.2	17239.9	16982.5	16755.3	16402.7	15632.5
55°	13945.1	14142.0	14832.1	16132.3	17603.4	18481.7	18546.6	18431.9	18176.7	17620.7	16443.8
57.5°	12171.1	12463.2	13555.7	15582.8	17596.9	19137.2	19827.3	19909.5	19624.0	18827.8	17082.0
60°	9713.5	10109.4	11442.1	14364.8	17053.9	19492.0	20950.1	21361.1	21058.3	20017.7	17599.0
62.5°	6777.8	7236.5	8497.7	12456.7	15812.1	19236.7	21770.0	22529.4	22300.1	21082.1	17798.1
65°	4134.2	4281.3	5298.1	9802.2	13700.6	18168.0	22023.1	23161.1	23085.4	21733.2	17503.9
67.5°	2754.0	2877.3	3169.3	6721.6	10635.1	16032.8	21417.4	23050.7	23072.4	21627.2	16426.5
70°	1659.3	1765.3	1955.7	3909.2	6892.5	12690.3	19541.7	21644.5	21770.0	20210.2	14384.3
72.5°	683.6	755.0	928.1	1771.8	3569.6	8054.2	15561.1	18583.4	18875.4	16993.3	11039.7
75°	387.2	424.0	545.2	889.1	1549.0	3753.5	9425.8	13192.2	13622.8	11712.5	6641.6
77.5°	257.4	274.7	352.6	575.5	871.8	1280.7	4028.2	6873.0	7695.1	6397.1	2875.1
80°	173.1	188.2	242.3	385.1	566.8	549.5	1282.9	2546.3	3132.6	2198.0	700.9
82.5°	116.8	119.0	173.1	253.1	359.1	266.1	378.6	791.8	995.2	636.0	266.1
85°	67.1	64.9	127.6	147.1	160.1	110.3	114.7	238.0	311.5	268.3	151.4
87.5°	8.7	13.0	49.8	38.9	21.6	23.8	23.8	41.1	60.6	64.9	32.5
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°	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5	3753.5
2.5°	3757.8	3755.6	3749.1	3742.6	3727.5	3718.8	3723.2	3718.8	3716.7	3718.8	3727.5
5°	3785.9	3779.4	3762.1	3740.5	3710.2	3673.4	3649.6	3615.0	3582.5	3563.1	3567.4
7.5°	3861.6	3855.1	3831.3	3770.8	3673.4	3519.8	3379.2	3255.9	3162.9	3108.8	3110.9
10°	3982.8	3972.0	3935.2	3801.0	3545.8	3210.4	2931.4	2699.9	2548.5	2477.1	2470.6
12.5°	4125.6	4112.6	4047.7	3772.9	3303.5	2779.9	2394.9	2137.4	1996.8	1934.1	1927.6
15°	4294.3	4277.0	4149.3	3638.8	2950.8	2304.0	1951.4	1758.8	1668.0	1611.7	1613.9
17.5°	4504.1	4473.9	4225.1	3437.6	2567.9	1940.5	1678.8	1533.8	1453.8	1399.7	1395.4
20°	4776.7	4727.0	4285.6	3197.5	2215.3	1711.2	1494.9	1373.7	1313.2	1265.6	1256.9
22.5°	5157.5	5086.1	4359.2	2937.9	1966.5	1553.3	1358.6	1269.9	1220.1	1166.1	1157.4
25°	5629.1	5544.7	4450.1	2697.7	1795.6	1417.0	1259.1	1185.5	1127.1	1064.4	1057.9
27.5°	6288.9	6137.5	4558.2	2500.9	1648.5	1300.2	1168.2	1086.0	1018.9	967.0	956.2
30°	7024.5	6775.7	4653.4	2381.9	1514.4	1192.0	1049.2	967.0	904.3	867.5	861.0
32.5°	7721.1	7383.6	4716.2	2330.0	1393.2	1068.7	919.4	830.7	783.1	772.3	778.8
35°	8378.7	7933.1	4709.7	2280.2	1285.0	945.4	791.8	700.9	664.2	670.6	670.6
37.5°	9135.9	8519.4	4664.2	2202.3	1196.3	832.9	681.5	601.4	569.0	571.1	579.8
40°	10016.4	9196.5	4636.1	2055.2	1099.0	729.1	590.6	525.7	501.9	493.2	491.1
42.5°	10955.3	9852.0	4640.4	1888.6	977.8	636.0	527.9	473.8	452.1	445.7	443.5
45°	11898.6	10477.2	4646.9	1715.6	850.2	564.6	482.4	437.0	424.0	415.4	415.4
47.5°	12785.5	11009.4	4525.8	1529.5	724.7	510.6	445.7	415.4	404.6	393.7	393.7
50°	13611.9	11364.2	4233.7	1313.2	625.2	467.3	417.5	395.9	385.1	374.3	374.3
52.5°	14254.5	11420.4	3751.3	1090.3	556.0	434.8	400.2	380.8	367.8	357.0	354.8
55°	14540.0	11067.8	3065.5	882.7	501.9	406.7	382.9	363.4	348.3	337.5	335.3
57.5°	14466.5	10325.8	2390.5	709.6	450.0	378.6	361.3	348.3	331.0	313.7	311.5
60°	14105.2	9332.8	1802.1	590.6	402.4	348.3	337.5	326.7	302.9	276.9	272.6
62.5°	13480.0	8084.5	1285.0	488.9	350.5	313.7	309.4	300.7	266.1	218.5	214.2
65°	12523.8	6568.0	865.3	406.7	300.7	274.7	276.9	261.8	216.3	162.3	157.9
67.5°	11126.2	4802.7	553.8	333.2	251.0	229.3	231.5	222.8	183.9	138.5	132.0
70°	9345.8	3180.2	361.3	253.1	201.2	177.4	190.4	192.5	155.8	112.5	108.2
72.5°	6851.4	1877.8	253.1	188.2	147.1	123.3	155.8	160.1	125.5	84.4	80.0
75°	3904.9	891.3	190.4	136.3	90.9	86.5	121.1	121.1	86.5	56.2	51.9
77.5°	1639.8	372.1	134.1	88.7	51.9	49.8	82.2	75.7	43.3	26.0	26.0
80°	473.8	166.6	71.4	43.3	21.6	19.5	32.5	23.8	10.8	4.3	4.3
82.5°	186.1	73.6	28.1	17.3	8.7	8.7	4.3	0.0	0.0	0.0	0.0
85°	110.3	30.3	13.0	6.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	28.1	6.5	4.3	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)