

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: P965032

Luminaire Tested: **NAV-SB3D-727-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-727-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21197 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

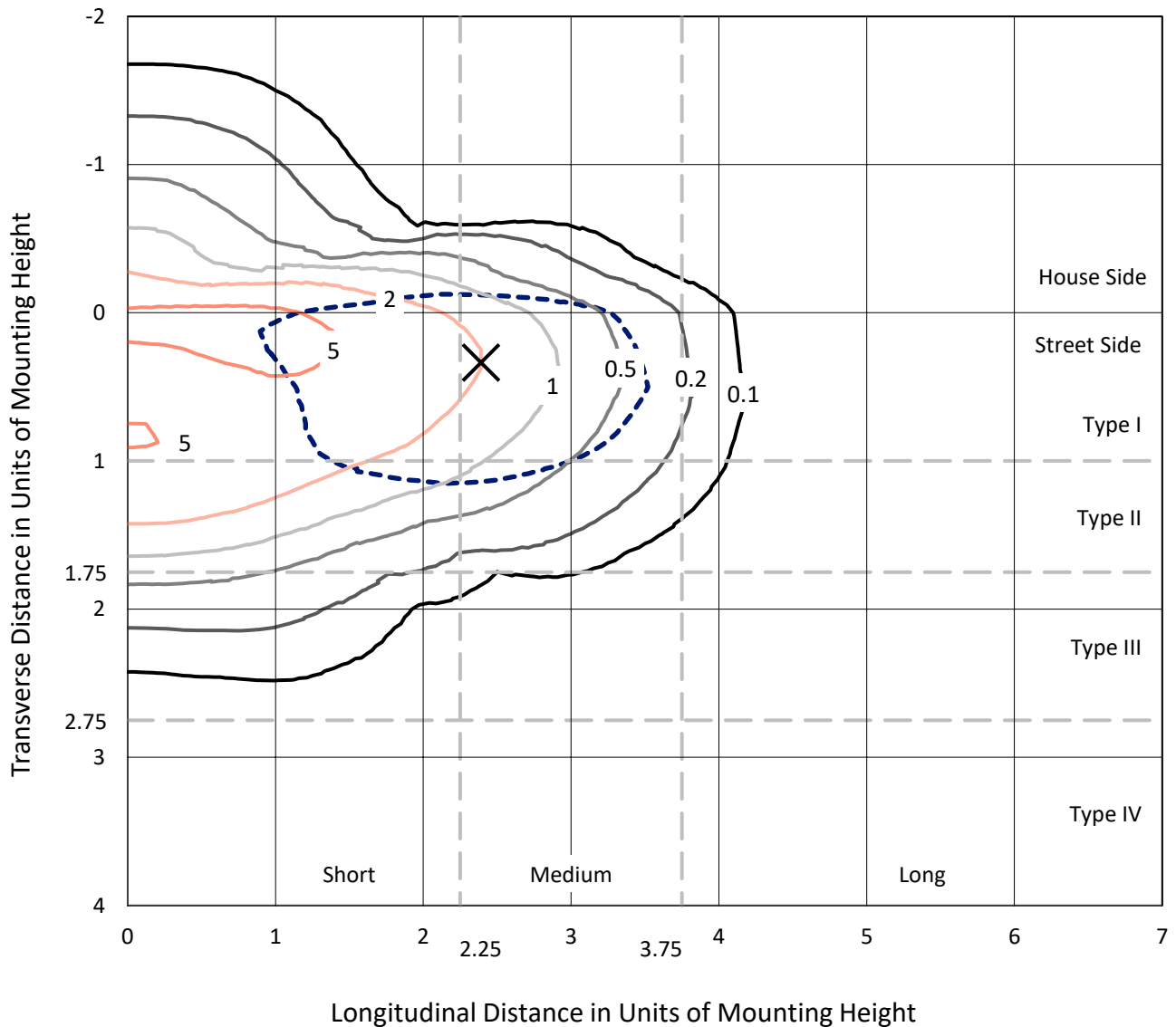
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

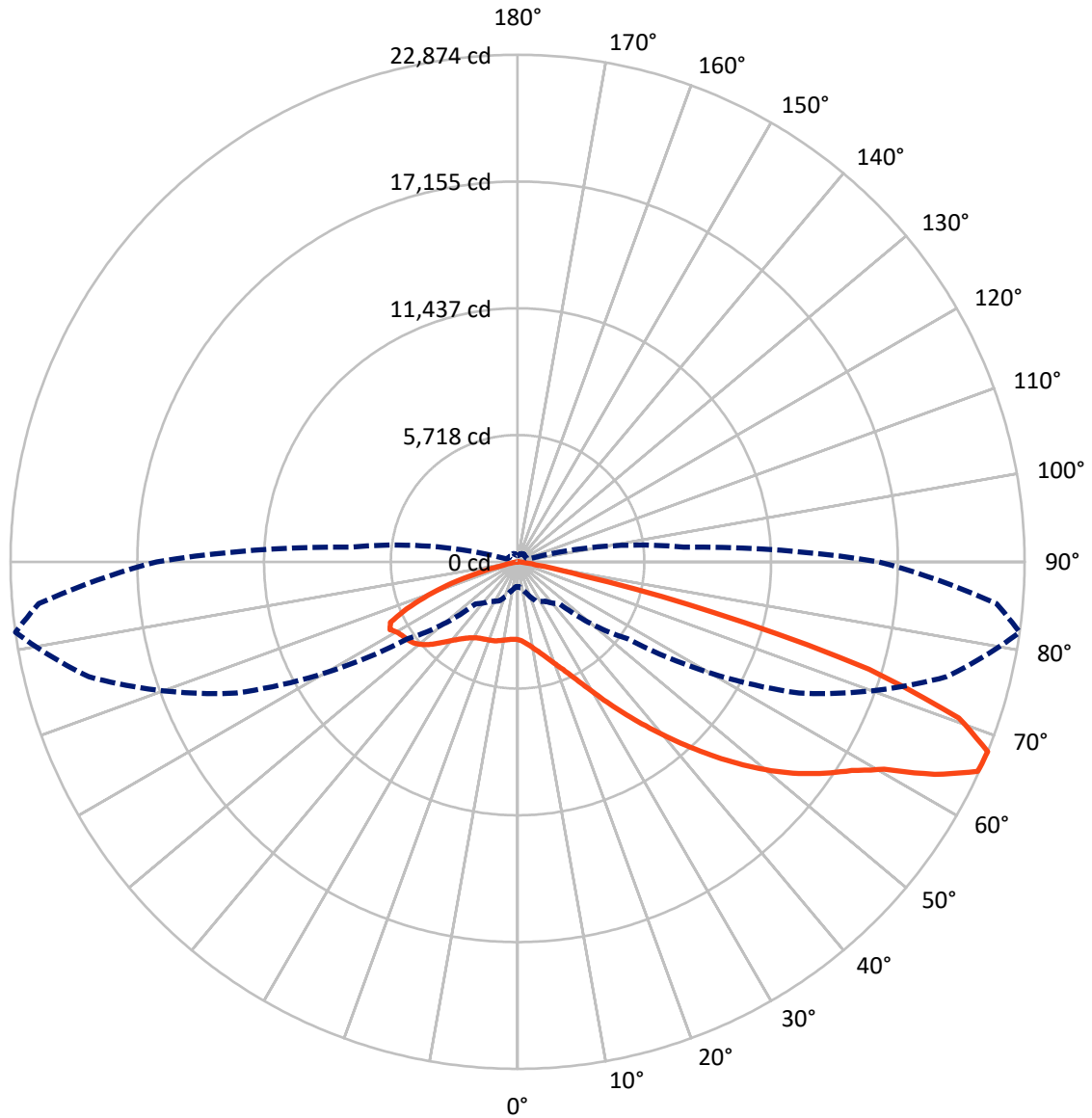
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 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	3839.6	0.0	3839.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	17357.4	0.0	17357.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	21197.0	0.0	21197.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.9	1.5
10°-20°	813.0	3.8
20°-30°	1302.2	6.1
30°-40°	2302.6	10.9
40°-50°	4034.4	19.0
50°-60°	5380.8	25.4
60°-70°	5009.2	23.6
70°-80°	1922.5	9.1
80°-90°	119.4	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°	21197.0	100.0
0°-180°	21197.0	100.0

Coefficient of Utilization



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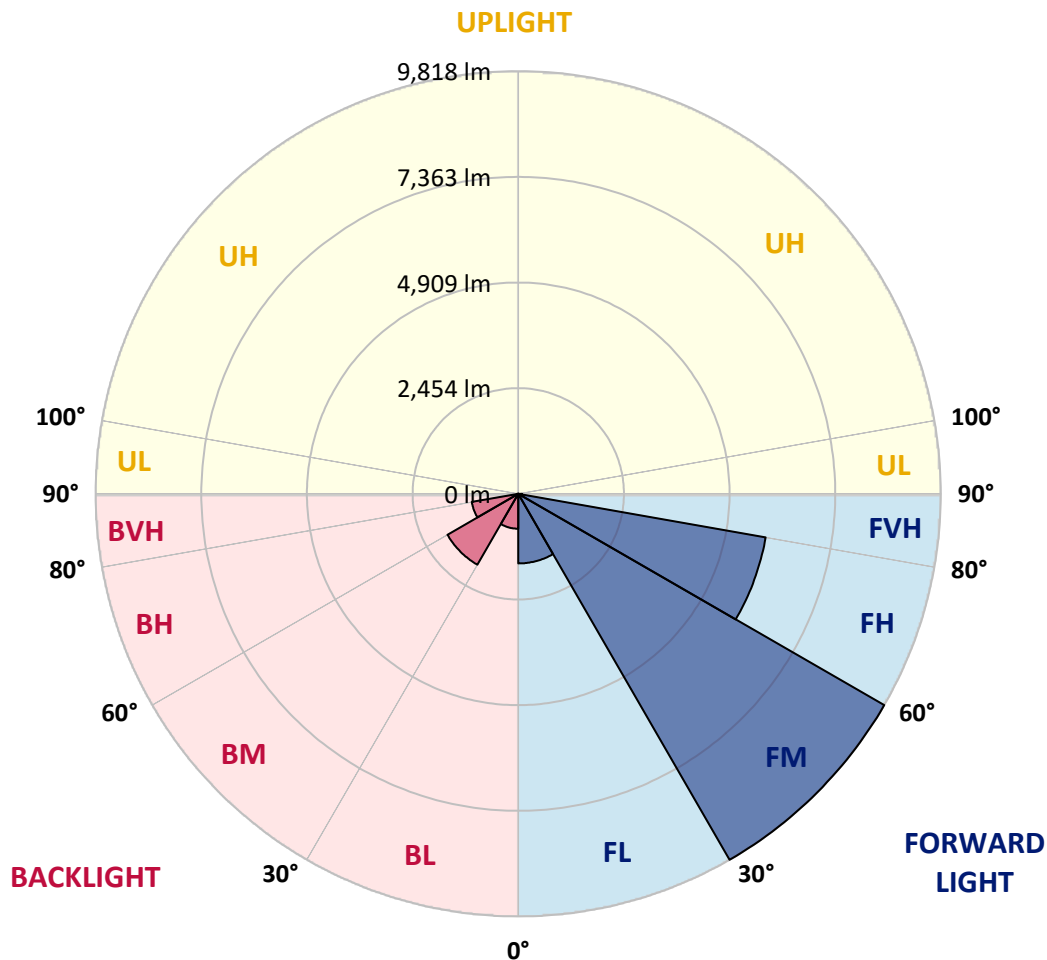
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1617.1	7.6			
FM (30°-60°)	9817.6	46.3			
FH (60°-80°)	5835.9	27.5			G3/7500
FVH (80°-90°)	86.8	0.4			G1/100
BL (0°-30°)	810.9	3.8	B2/1000		
BM (30°-60°)	1900.2	9.0	B2/2500		
BH (60°-80°)	1095.9	5.2	B3/2500		G3/2500
BVH (80°-90°)	32.6	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°	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6
2.5°	3711.5	3732.9	3720.7	3714.6	3703.9	3688.7	3676.5	3638.3	3598.6	3572.6	3563.5
5°	3786.3	3807.7	3806.1	3812.3	3819.9	3824.5	3821.4	3778.7	3722.2	3678.0	3652.1
7.5°	3722.2	3746.7	3766.5	3797.0	3850.4	3906.9	3934.4	3925.2	3867.2	3806.1	3774.2
10°	3540.7	3566.6	3613.8	3685.6	3798.5	3920.6	4022.9	4070.2	4033.6	3966.4	3922.2
12.5°	3207.9	3233.9	3326.9	3482.6	3671.9	3884.0	4079.3	4206.0	4215.2	4148.1	4096.1
15°	2834.0	2860.0	2959.2	3154.5	3443.0	3783.3	4109.8	4349.5	4430.4	4372.3	4309.8
17.5°	2602.1	2624.9	2699.7	2856.9	3157.5	3581.9	4099.2	4502.1	4686.7	4641.0	4566.2
20°	2531.9	2551.7	2586.8	2696.7	2947.0	3372.8	4029.0	4645.5	4962.9	4937.0	4853.1
22.5°	2606.7	2624.9	2635.6	2684.5	2841.6	3235.4	3940.5	4792.1	5283.5	5286.5	5184.2
25°	2779.1	2797.4	2785.2	2815.7	2884.4	3192.7	3906.9	4964.5	5686.4	5719.9	5604.0
27.5°	3062.9	3064.4	3035.4	3033.9	3044.7	3256.7	3941.9	5149.2	6194.6	6257.1	6113.7
30°	3632.2	3609.3	3497.9	3377.4	3322.4	3449.0	4039.6	5367.4	6794.3	6905.7	6725.6
32.5°	4509.7	4476.2	4271.7	3983.2	3693.3	3758.9	4215.2	5616.2	7447.5	7649.0	7429.2
35°	5462.0	5452.9	5239.2	4810.3	4303.7	4199.9	4500.6	5942.7	8160.2	8480.7	8219.8
37.5°	6347.2	6342.6	6220.5	5715.4	5098.8	4814.9	4958.4	6370.1	8923.2	9387.3	9078.9
40°	7156.0	7169.8	7047.7	6596.0	5974.8	5604.0	5581.0	6898.1	9771.8	10374.6	10008.4
42.5°	7855.0	7870.3	7746.6	7412.4	6840.1	6476.9	6345.7	7545.2	10600.6	11435.3	11001.8
45°	8329.7	8424.3	8405.9	8138.8	7728.3	7351.4	7264.4	8357.1	11545.2	12560.0	12051.8
47.5°	8463.9	8550.9	8688.3	8724.9	8474.6	8103.8	8207.5	9335.3	12500.5	13686.3	13107.9
50°	8132.8	8213.6	8499.0	8879.1	9053.0	8938.5	9124.8	10383.8	13478.7	14809.6	14144.2
52.5°	7479.5	7561.9	7922.1	8523.4	9233.1	9593.3	10045.0	11417.0	14426.5	15873.3	15125.5
55°	6534.9	6621.9	7084.3	7765.0	8889.7	9863.4	10812.6	12448.6	15294.8	16830.2	16010.6
57.5°	5249.8	5314.0	5794.7	6747.1	8026.0	9594.8	11378.8	13574.9	16112.9	17770.2	16888.2
60°	3421.6	3478.0	4036.7	5098.8	6594.4	8697.4	11491.8	14830.9	17199.5	18992.7	18071.0
62.5°	2275.5	2313.6	2644.8	3424.6	4644.0	6974.4	10831.0	15833.6	18792.8	21120.1	20099.1
65°	1561.3	1599.4	1930.6	2473.8	3000.4	4613.5	8930.9	15700.8	20236.5	22809.5	21602.4
67.5°	1114.1	1146.2	1426.9	1939.7	2171.7	2679.9	6054.2	14003.8	20028.9	22873.6	21683.3
70°	798.2	816.5	1048.5	1510.8	1726.1	1610.1	3366.6	10710.4	17536.7	21121.7	20032.0
72.5°	558.5	564.7	728.0	1150.7	1390.3	1175.2	1602.5	7140.8	13263.6	16578.4	15529.9
75°	378.4	386.1	489.8	844.0	1115.6	897.4	848.5	3829.1	7786.3	9176.6	8225.8
77.5°	232.0	235.0	315.9	576.9	834.8	683.7	546.3	1622.3	3012.6	2957.6	2521.2
80°	131.2	131.2	201.4	358.6	569.3	441.1	383.0	689.8	953.9	837.8	738.6
82.5°	73.3	74.8	146.5	222.8	377.0	261.0	210.6	319.0	412.0	364.7	317.4
85°	30.5	33.6	90.0	105.3	180.1	129.8	85.5	134.3	152.6	135.8	99.2
87.5°	3.1	4.6	27.5	19.9	21.3	25.9	12.2	25.9	21.3	21.3	15.3
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°	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6	3511.6
2.5°	3534.5	3511.6	3453.6	3386.5	3297.9	3255.2	3197.3	3157.5	3124.0	3127.1	3096.5
5°	3603.2	3545.2	3415.5	3253.8	3052.2	2908.8	2756.2	2650.9	2565.5	2547.1	2505.9
7.5°	3697.8	3606.3	3378.8	3087.4	2747.0	2489.1	2258.7	2110.7	2005.3	1971.8	1938.2
10°	3819.9	3687.1	3331.6	2878.3	2388.4	2060.2	1813.0	1697.1	1625.3	1600.9	1582.6
12.5°	3961.8	3780.2	3268.9	2623.4	2019.0	1703.1	1546.0	1488.0	1465.1	1457.4	1452.8
15°	4140.4	3896.2	3174.3	2321.2	1706.2	1484.9	1417.8	1410.2	1413.2	1410.2	1408.7
17.5°	4352.6	4022.9	3020.2	2009.9	1495.6	1373.5	1349.1	1355.2	1362.8	1361.3	1358.2
20°	4584.5	4148.1	2823.4	1733.7	1352.2	1294.2	1280.4	1286.5	1292.6	1289.6	1288.0
22.5°	4848.6	4282.3	2605.1	1518.5	1256.0	1220.9	1205.6	1207.1	1207.1	1201.1	1198.0
25°	5164.5	4430.4	2376.2	1365.9	1182.7	1155.3	1136.9	1130.9	1121.7	1103.4	1100.3
27.5°	5541.4	4587.6	2156.4	1259.0	1124.7	1098.8	1077.5	1062.2	1039.2	1008.8	1005.7
30°	5965.6	4778.3	1970.3	1191.9	1079.0	1053.0	1028.6	1005.7	972.1	934.0	930.9
32.5°	6464.7	4982.8	1834.4	1147.7	1037.8	1010.3	981.3	953.9	917.2	879.0	880.6
35°	7059.9	5230.1	1755.0	1117.1	1005.7	969.1	937.1	906.5	879.0	845.5	842.4
37.5°	7705.4	5492.6	1730.6	1101.9	984.3	927.9	891.2	869.9	866.8	847.0	845.5
40°	8412.1	5803.9	1749.0	1092.8	961.4	888.2	848.5	844.0	851.6	816.5	818.1
42.5°	9159.8	6173.2	1779.5	1082.0	929.4	848.5	810.4	810.4	804.3	755.4	755.4
45°	9968.6	6599.0	1809.9	1056.1	891.2	808.8	779.8	769.2	743.2	695.9	694.4
47.5°	10783.6	7032.4	1832.9	1008.8	845.5	775.3	749.4	724.9	686.7	644.0	642.5
50°	11557.4	7421.6	1808.5	938.6	793.6	743.2	715.8	682.1	640.9	612.0	607.4
52.5°	12248.7	7758.8	1704.7	856.2	738.6	709.6	685.2	650.2	616.5	586.0	583.0
55°	12850.0	8032.0	1521.5	778.3	689.8	680.7	656.2	612.0	566.2	540.3	537.2
57.5°	13426.9	8239.6	1292.6	714.2	645.5	648.6	612.0	572.3	529.6	502.1	499.1
60°	14194.5	8517.3	1060.7	654.7	598.3	607.4	567.7	538.7	485.3	450.2	445.7
62.5°	15421.5	8949.3	842.4	581.5	543.4	546.3	529.6	494.5	430.4	389.2	386.1
65°	16395.2	8790.5	663.9	502.1	480.7	485.3	485.3	447.1	378.4	331.2	326.6
67.5°	16285.3	7526.9	529.6	424.2	421.2	424.2	434.9	402.9	335.8	297.6	291.5
70°	15001.9	5987.0	424.2	352.5	366.2	358.6	389.2	367.8	302.2	264.0	259.4
72.5°	12241.1	4312.9	323.5	291.5	280.8	293.0	351.0	331.2	251.8	209.1	204.5
75°	7153.0	2301.4	241.1	230.4	203.0	244.2	311.3	282.3	192.3	154.2	149.5
77.5°	2328.9	802.8	177.0	169.4	151.1	196.9	265.6	238.1	157.2	122.1	117.5
80°	624.2	242.6	120.5	111.4	97.7	146.5	210.6	189.2	113.0	79.3	77.8
82.5°	250.3	102.3	70.2	62.5	53.4	100.8	166.4	152.6	83.9	50.3	50.3
85°	80.9	33.6	25.9	19.9	24.4	62.5	99.2	103.7	59.6	25.9	19.9
87.5°	10.7	4.6	4.6	6.1	4.6	10.7	30.5	29.0	16.8	3.1	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)