

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: P884596

Luminaire Tested: **NAV-SB5C-727-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884596  
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-727-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

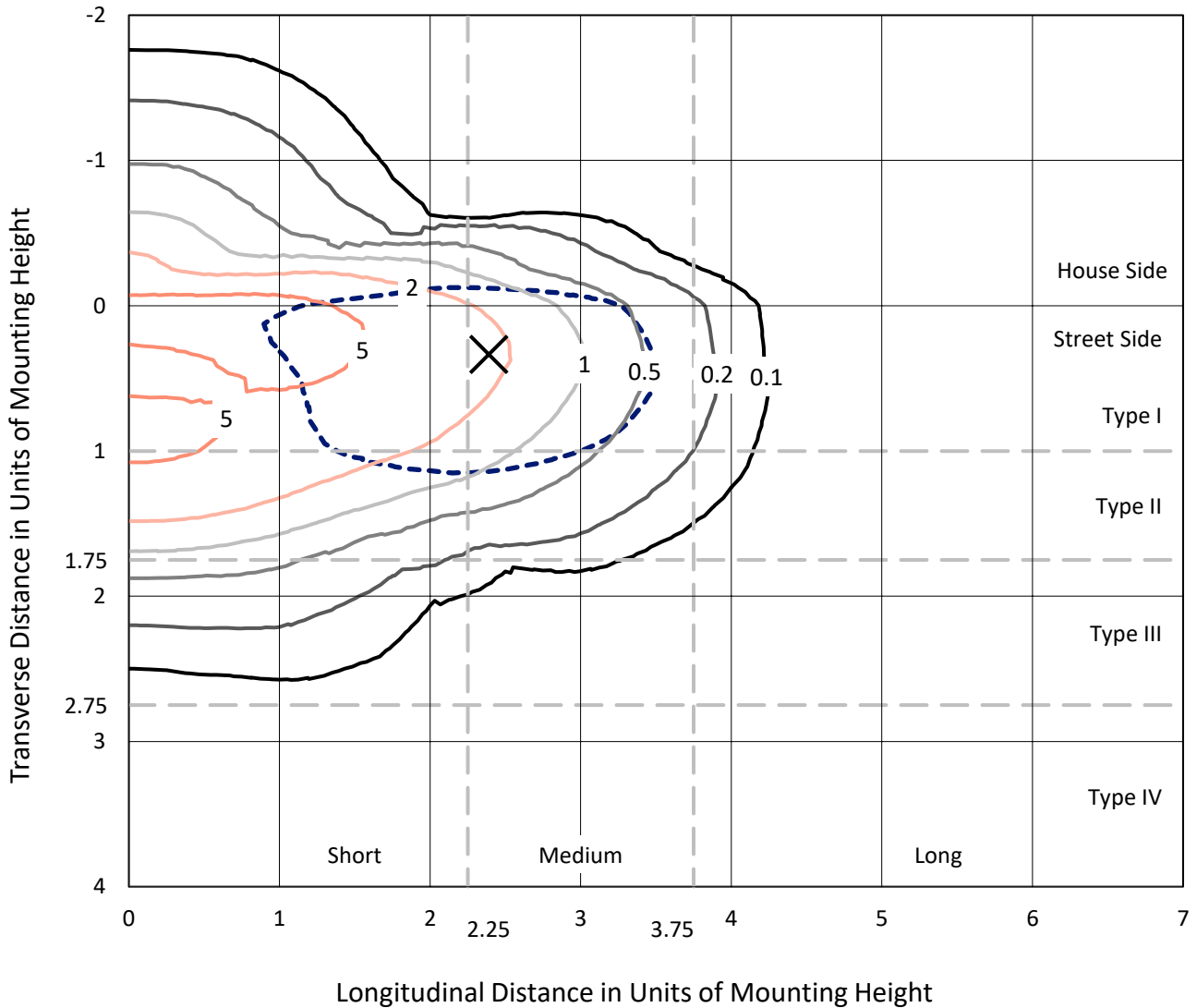
Lumens per Lamp: N/A  
Luminaire Lumens: 25149 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 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

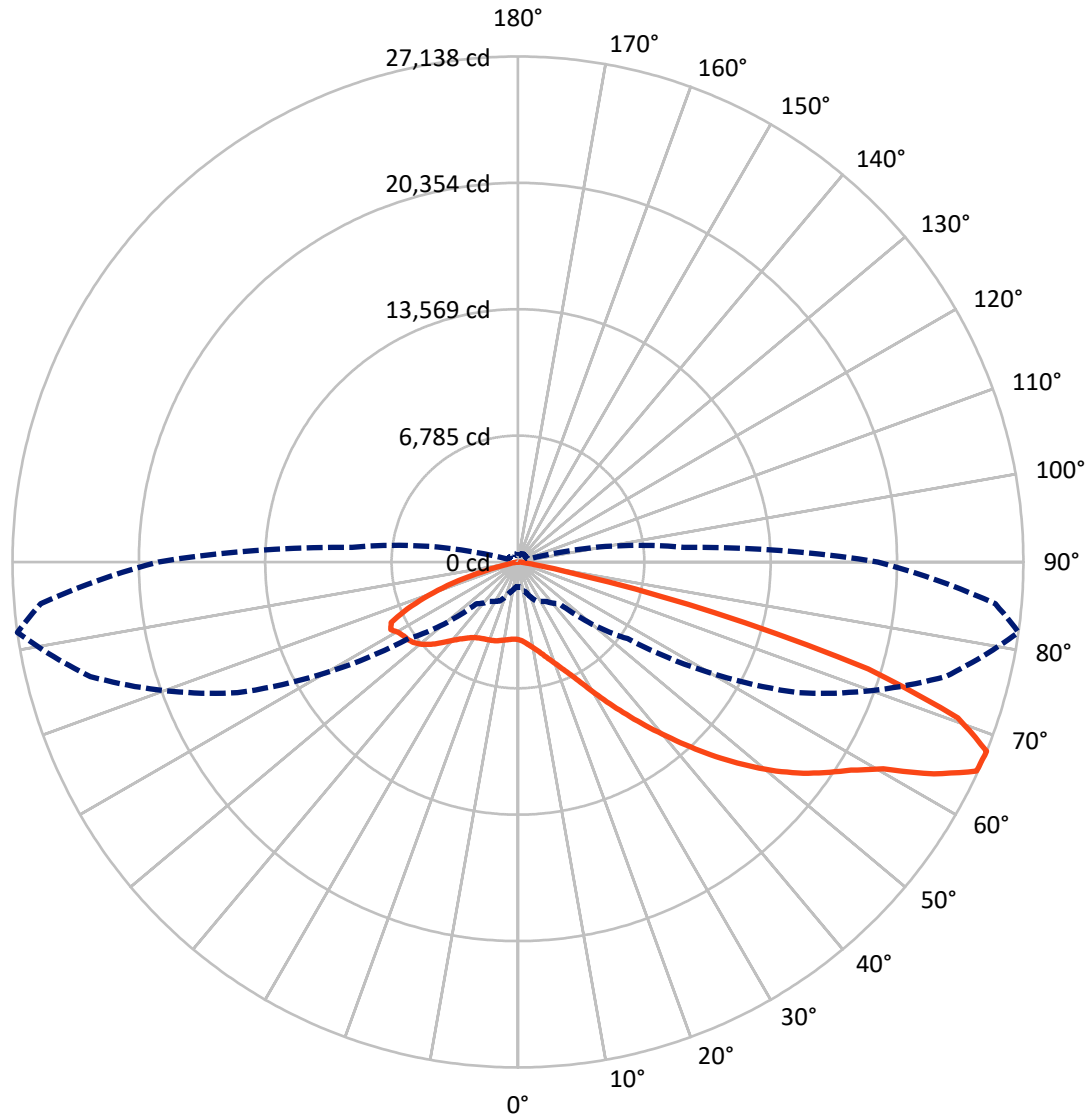
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 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
<b>House Side</b>	Lumens	4555.5	0.0	4555.5
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	20593.5	0.0	20593.5
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	25149.0	0.0	25149.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	371.2	1.5
10°-20°	964.6	3.8
20°-30°	1544.9	6.1
30°-40°	2731.9	10.9
40°-50°	4786.6	19.0
50°-60°	6384.0	25.4
60°-70°	5943.2	23.6
70°-80°	2281.0	9.1
80°-90°	141.7	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°	25149.0	100.0
0°-180°	25149.0	100.0

**Coefficient of Utilization**



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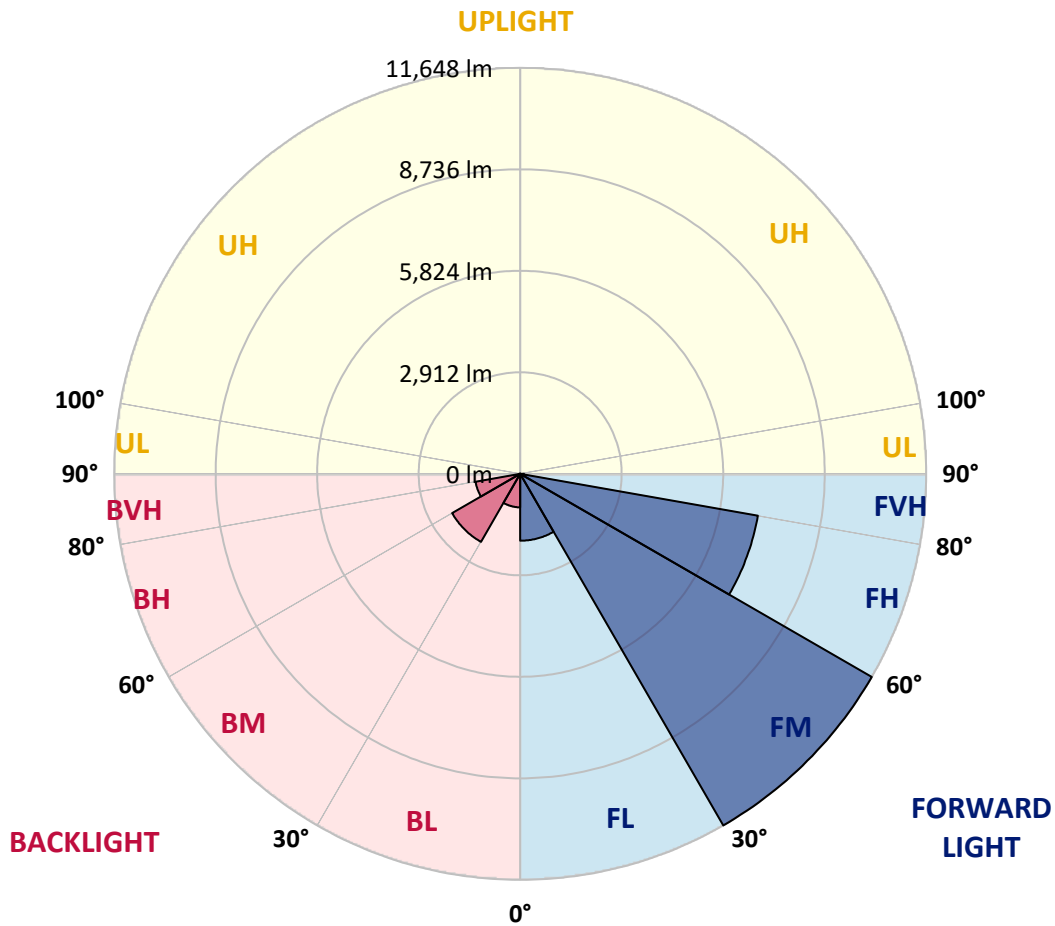
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1918.6	7.6			
FM (30°-60°)	11648.0	46.3			
FH (60°-80°)	6923.9	27.5			G3/7500
FVH (80°-90°)	103.0	0.4			G2/225
BL (0°-30°)	962.1	3.8	B2/1000		
BM (30°-60°)	2254.5	9.0	B2/2500		
BH (60°-80°)	1300.2	5.2	B3/2500		G3/2500
BVH (80°-90°)	38.7	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°	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3
2.5°	4403.5	4428.9	4414.4	4407.2	4394.5	4376.4	4361.9	4316.6	4269.5	4238.8	4227.9
5°	4492.3	4517.6	4515.8	4523.0	4532.1	4537.5	4533.9	4483.2	4416.2	4363.7	4332.9
7.5°	4416.2	4445.2	4468.7	4504.9	4568.3	4635.3	4667.9	4657.0	4588.2	4515.8	4477.8
10°	4200.7	4231.5	4287.7	4372.8	4506.7	4651.6	4772.9	4829.0	4785.6	4705.9	4653.4
12.5°	3806.0	3836.8	3947.2	4131.9	4356.5	4608.1	4839.9	4990.2	5001.1	4921.4	4859.8
15°	3362.4	3393.2	3510.9	3742.6	4084.9	4488.6	4876.1	5160.4	5256.4	5187.6	5113.3
17.5°	3087.2	3114.3	3203.1	3389.6	3746.3	4249.6	4863.4	5341.5	5560.5	5506.2	5417.5
20°	3003.9	3027.4	3069.1	3199.4	3496.4	4001.6	4780.2	5511.7	5888.3	5857.5	5757.9
22.5°	3092.6	3114.3	3127.0	3185.0	3371.5	3838.6	4675.1	5685.5	6268.5	6272.1	6150.8
25°	3297.2	3318.9	3304.5	3340.7	3422.2	3787.9	4635.3	5890.1	6746.5	6786.4	6648.8
27.5°	3634.0	3635.8	3601.4	3599.6	3612.3	3864.0	4676.9	6109.2	7349.5	7423.7	7253.5
30°	4309.4	4282.2	4150.0	4007.0	3941.8	4092.1	4792.8	6368.1	8061.1	8193.3	7979.6
32.5°	5350.5	5310.7	5068.0	4725.8	4381.8	4459.7	5001.1	6663.2	8836.0	9075.0	8814.3
35°	6480.4	6469.5	6216.0	5707.2	5106.1	4982.9	5339.6	7050.7	9681.6	10061.9	9752.2
37.5°	7530.6	7525.1	7380.3	6780.9	6049.4	5712.6	5882.8	7557.7	10587.0	11137.4	10771.6
40°	8490.2	8506.5	8361.6	7825.7	7088.8	6648.8	6621.6	8184.2	11593.7	12308.9	11874.3
42.5°	9319.5	9337.6	9190.9	8794.4	8115.4	7684.5	7528.7	8951.9	12576.9	13567.3	13053.1
45°	9882.6	9994.9	9973.1	9656.3	9169.2	8722.0	8618.8	9915.2	13697.7	14901.8	14298.8
47.5°	10041.9	10145.2	10308.1	10351.6	10054.6	9614.6	9737.8	11075.8	14831.2	16238.0	15551.8
50°	9649.0	9745.0	10083.6	10534.4	10740.9	10605.1	10826.0	12319.8	15991.8	17570.7	16781.2
52.5°	8874.1	8971.8	9399.2	10112.6	10954.5	11381.8	11917.8	13545.6	17116.2	18832.7	17945.5
55°	7753.3	7856.5	8405.1	9212.7	10547.1	11702.3	12828.6	14769.6	18146.5	19968.0	18995.7
57.5°	6228.7	6304.7	6875.1	8004.9	9522.3	11383.6	13500.3	16105.9	19117.0	21083.4	20036.8
60°	4059.5	4126.5	4789.2	6049.4	7823.9	10319.0	13634.3	17596.0	20406.2	22533.7	21440.1
62.5°	2699.7	2745.0	3137.9	4063.1	5509.9	8274.7	12850.3	18785.6	22296.5	25057.8	23846.4
65°	1852.3	1897.6	2290.5	2935.1	3559.8	5473.6	10596.0	18628.1	24009.4	27062.2	25630.0
67.5°	1321.8	1359.8	1693.0	2301.4	2576.6	3179.5	7182.9	16614.7	23763.2	27138.2	25725.9
70°	947.0	968.7	1243.9	1792.6	2047.9	1910.3	3994.3	12707.2	20806.3	25059.6	23766.8
72.5°	662.7	669.9	863.7	1365.2	1649.5	1394.2	1901.2	8472.1	15736.5	19669.2	18425.3
75°	449.0	458.1	581.2	1001.3	1323.6	1064.7	1006.7	4543.0	9238.0	10887.5	9759.5
77.5°	275.2	278.8	374.8	684.4	990.4	811.2	648.2	1924.7	3574.3	3509.1	2991.2
80°	155.7	155.7	239.0	425.5	675.4	523.3	454.5	818.4	1131.7	994.1	876.4
82.5°	86.9	88.7	173.8	264.4	447.2	309.6	249.9	378.4	488.9	432.7	376.6
85°	36.2	39.8	106.8	124.9	213.7	153.9	101.4	159.3	181.1	161.1	117.7
87.5°	3.6	5.4	32.6	23.5	25.3	30.8	14.5	30.8	25.3	25.3	18.1
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°	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3	4166.3
2.5°	4193.5	4166.3	4097.5	4017.9	3912.8	3862.1	3793.3	3746.3	3706.4	3710.1	3673.8
5°	4275.0	4206.2	4052.3	3860.3	3621.3	3451.1	3270.1	3145.1	3043.7	3022.0	2973.1
7.5°	4387.2	4278.6	4008.8	3663.0	3259.2	2953.2	2679.8	2504.1	2379.2	2339.4	2299.5
10°	4532.1	4374.6	3952.7	3414.9	2833.7	2444.4	2151.1	2013.5	1928.4	1899.4	1877.7
12.5°	4700.5	4485.0	3878.4	3112.5	2395.5	2020.7	1834.2	1765.4	1738.2	1729.2	1723.8
15°	4912.3	4622.6	3766.2	2754.0	2024.3	1761.8	1682.1	1673.1	1676.7	1673.1	1671.2
17.5°	5164.0	4772.9	3583.3	2384.6	1774.5	1629.6	1600.6	1607.9	1616.9	1615.1	1611.5
20°	5439.2	4921.4	3349.7	2056.9	1604.2	1535.4	1519.1	1526.4	1533.6	1530.0	1528.2
22.5°	5752.5	5080.7	3090.8	1801.6	1490.2	1448.5	1430.4	1432.2	1432.2	1425.0	1421.4
25°	6127.3	5256.4	2819.2	1620.5	1403.3	1370.7	1348.9	1341.7	1330.8	1309.1	1305.5
27.5°	6574.5	5442.9	2558.5	1493.8	1334.5	1303.7	1278.3	1260.2	1233.1	1196.8	1193.2
30°	7077.9	5669.2	2337.6	1414.1	1280.1	1249.4	1220.4	1193.2	1153.4	1108.1	1104.5
32.5°	7670.0	5911.8	2176.4	1361.6	1231.3	1198.7	1164.3	1131.7	1088.2	1042.9	1044.8
35°	8376.1	6205.1	2082.3	1325.4	1193.2	1149.8	1111.7	1075.5	1042.9	1003.1	999.5
37.5°	9142.0	6516.6	2053.3	1307.3	1167.9	1100.9	1057.4	1032.1	1028.5	1004.9	1003.1
40°	9980.4	6886.0	2075.0	1296.4	1140.7	1053.8	1006.7	1001.3	1010.4	968.7	970.5
42.5°	10867.6	7324.1	2111.2	1283.8	1102.7	1006.7	961.5	961.5	954.2	896.3	896.3
45°	11827.3	7829.3	2147.4	1253.0	1057.4	959.7	925.2	912.6	881.8	825.7	823.9
47.5°	12794.2	8343.5	2174.6	1196.8	1003.1	919.8	889.0	860.1	814.8	764.1	762.3
50°	13712.2	8805.3	2145.6	1113.6	941.5	881.8	849.2	809.4	760.5	726.1	720.6
52.5°	14532.4	9205.4	2022.5	1015.8	876.4	842.0	813.0	771.3	731.5	695.3	691.7
55°	15245.8	9529.5	1805.2	923.4	818.4	807.6	778.6	726.1	671.8	641.0	637.4
57.5°	15930.2	9775.8	1533.6	847.4	765.9	769.5	726.1	679.0	628.3	595.7	592.1
60°	16841.0	10105.3	1258.4	776.8	709.8	720.6	673.6	639.2	575.8	534.1	528.7
62.5°	18296.8	10617.7	999.5	689.9	644.6	648.2	628.3	586.7	510.6	461.7	458.1
65°	19452.0	10429.4	787.6	595.7	570.4	575.8	575.8	530.5	449.0	392.9	387.5
67.5°	19321.6	8930.2	628.3	503.4	499.7	503.4	516.0	478.0	398.3	353.1	345.8
70°	17798.8	7103.2	503.4	418.3	434.6	425.5	461.7	436.4	358.5	313.2	307.8
72.5°	14523.3	5116.9	383.9	345.8	333.2	347.6	416.5	392.9	298.8	248.1	242.6
75°	8486.6	2730.5	286.1	273.4	240.8	289.7	369.4	335.0	228.1	182.9	177.4
77.5°	2763.1	952.4	210.0	201.0	179.3	233.6	315.1	282.5	186.5	144.9	139.4
80°	740.6	287.9	143.0	132.2	115.9	173.8	249.9	224.5	134.0	94.2	92.3
82.5°	296.9	121.3	83.3	74.2	63.4	119.5	197.4	181.1	99.6	59.8	59.8
85°	96.0	39.8	30.8	23.5	29.0	74.2	117.7	123.1	70.6	30.8	23.5
87.5°	12.7	5.4	5.4	7.2	5.4	12.7	36.2	34.4	19.9	3.6	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)