

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: P884626

Luminaire Tested: **NAV-SB5C-740-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884626
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-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 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: 29918 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

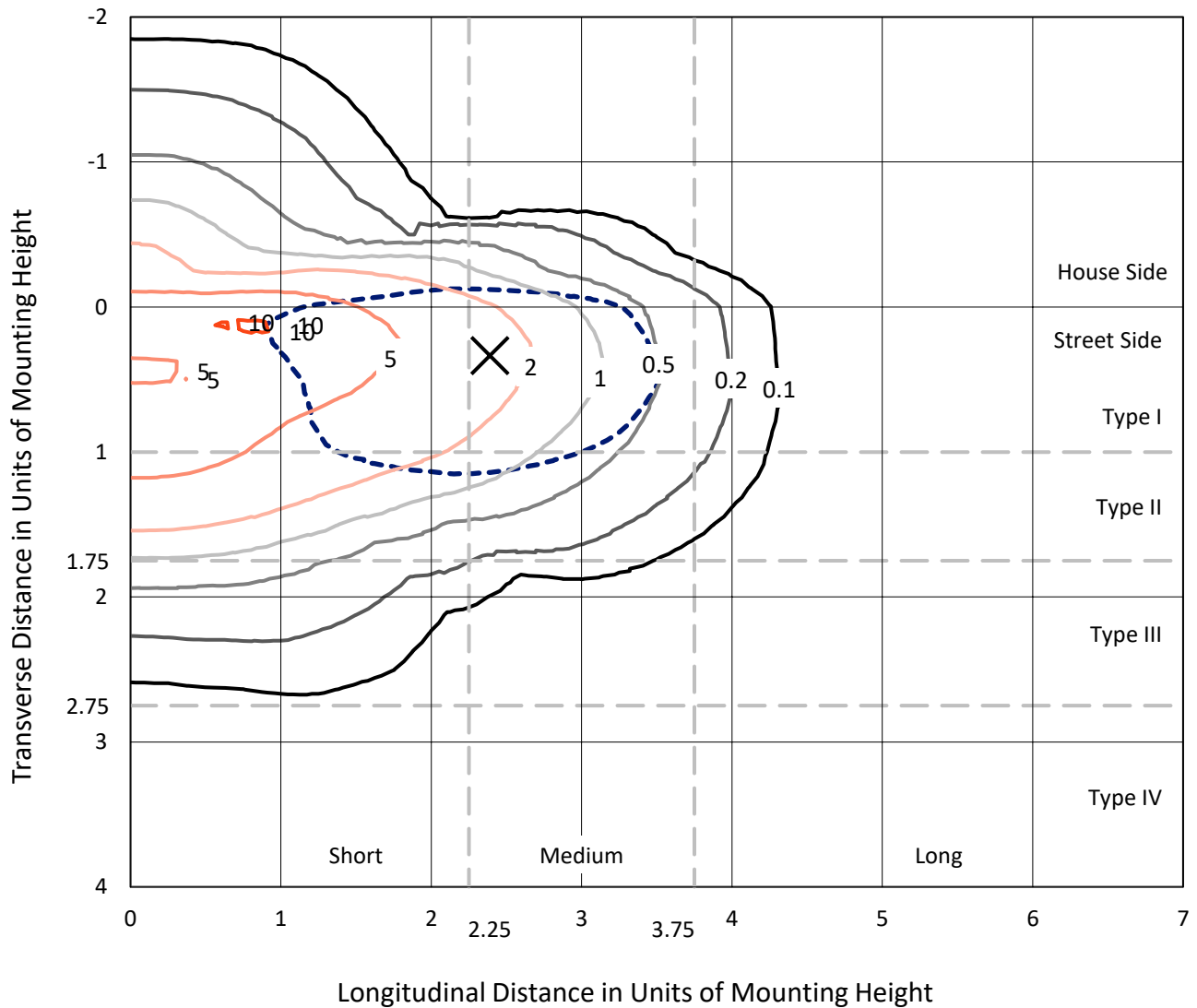
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

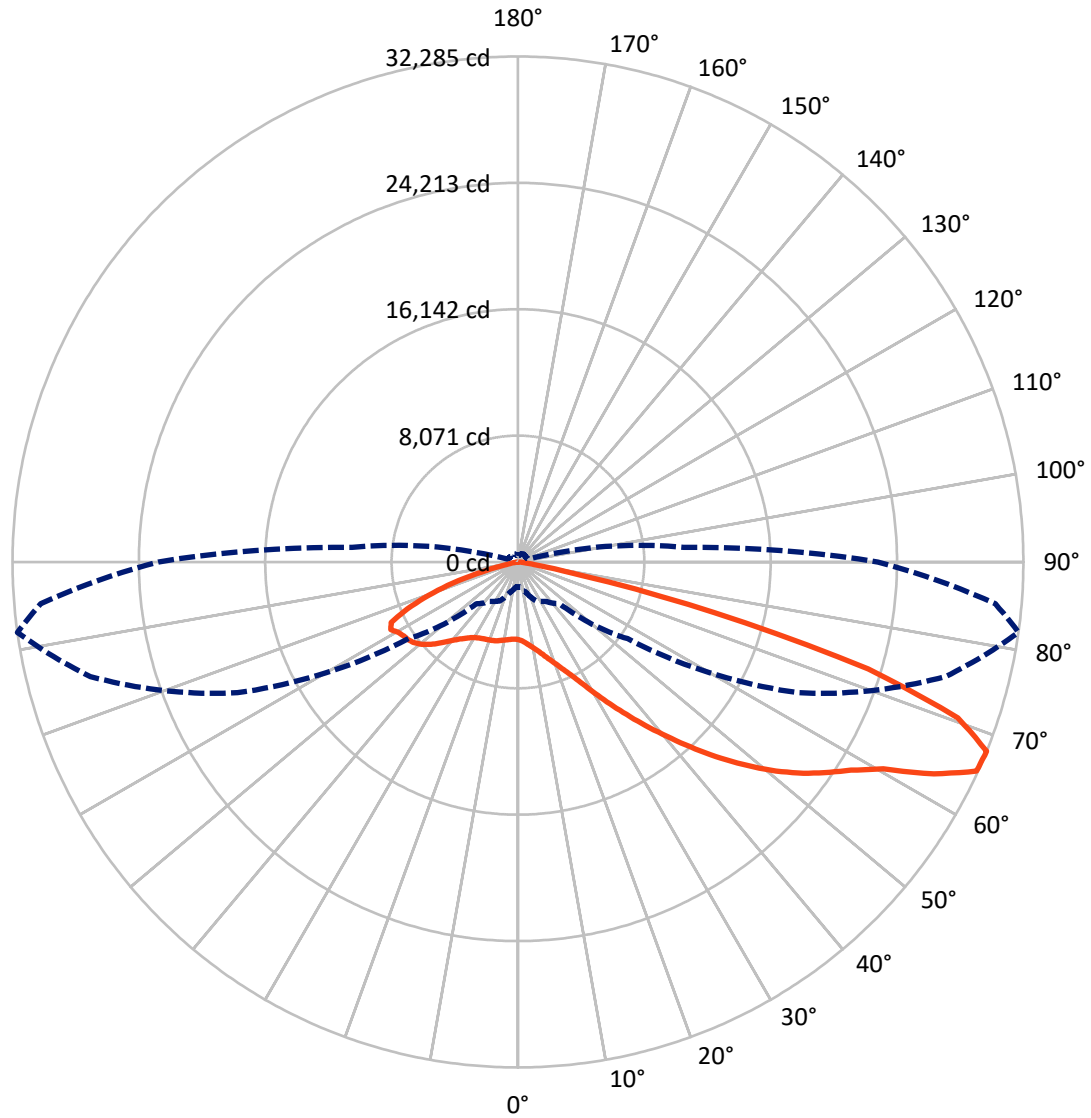
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 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	5419.4	0.0	5419.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	24498.6	0.0	24498.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	29918.0	0.0	29918.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	441.6	1.5
10°-20°	1147.5	3.8
20°-30°	1837.9	6.1
30°-40°	3250.0	10.9
40°-50°	5694.3	19.0
50°-60°	7594.6	25.4
60°-70°	7070.2	23.6
70°-80°	2713.5	9.1
80°-90°	168.5	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°	29918.0	100.0
0°-180°	29918.0	100.0

Coefficient of Utilization



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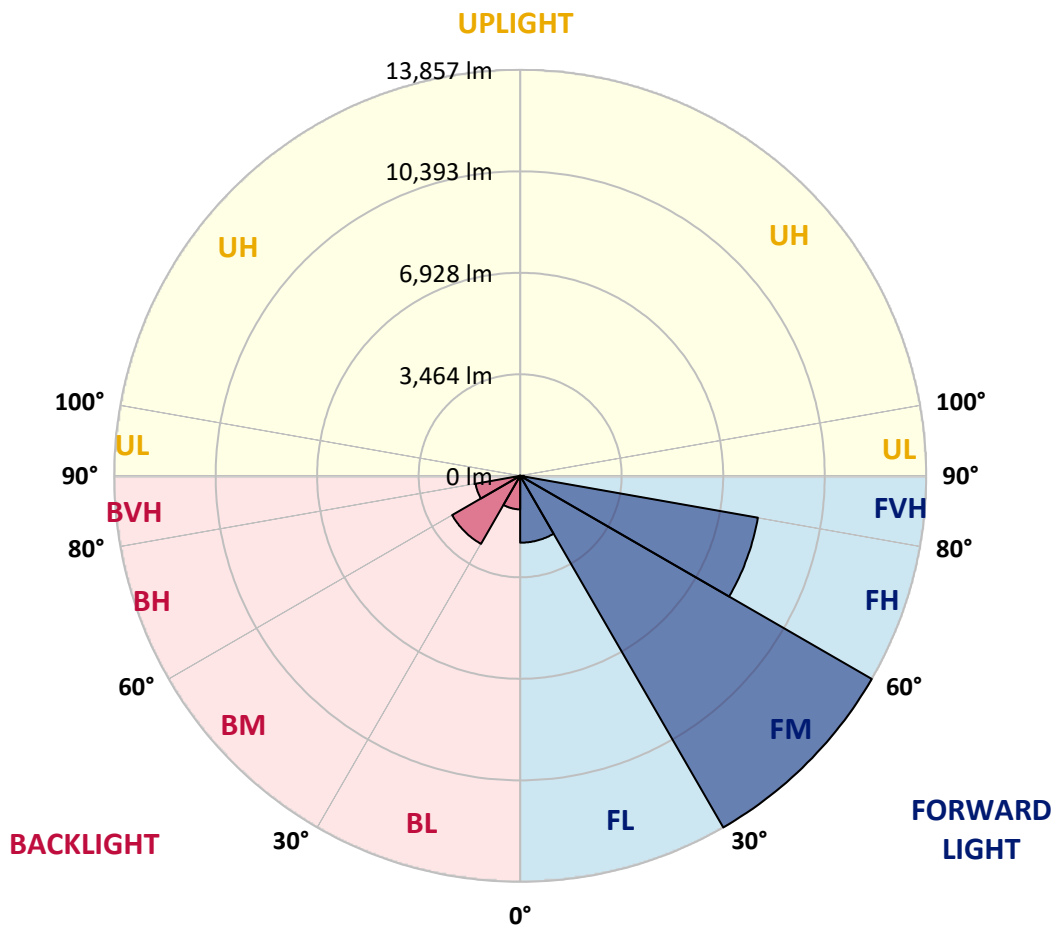
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2282.4	7.6			
FM (30°-60°)	13856.8	46.3			
FH (60°-80°)	8236.9	27.5			G4/12000
FVH (80°-90°)	122.5	0.4			G2/225
BL (0°-30°)	1144.6	3.8	B3/2500		
BM (30°-60°)	2682.0	9.0	B3/5000		
BH (60°-80°)	1546.8	5.2	B3/2500		G3/2500
BVH (80°-90°)	46.0	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-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4
2.5°	5238.6	5268.7	5251.5	5242.9	5227.8	5206.3	5189.0	5135.2	5079.2	5042.6	5029.6
5°	5344.1	5374.3	5372.1	5380.7	5391.5	5398.0	5393.7	5333.4	5253.7	5191.2	5154.6
7.5°	5253.7	5288.1	5316.1	5359.2	5434.6	5514.3	5553.1	5540.1	5458.3	5372.1	5326.9
10°	4997.3	5033.9	5100.7	5202.0	5361.4	5533.7	5678.0	5744.8	5693.1	5598.3	5535.8
12.5°	4527.8	4564.4	4695.8	4915.5	5182.6	5482.0	5757.7	5936.5	5949.4	5854.6	5781.4
15°	4000.0	4036.6	4176.6	4452.4	4859.5	5339.8	5800.8	6139.0	6253.1	6171.3	6083.0
17.5°	3672.6	3704.9	3810.5	4032.3	4456.7	5055.5	5785.7	6354.4	6615.0	6550.4	6444.8
20°	3573.5	3601.5	3651.1	3806.2	4159.4	4760.4	5686.6	6556.8	7004.9	6968.3	6849.8
22.5°	3679.1	3704.9	3720.0	3788.9	4010.8	4566.5	5561.7	6763.6	7457.2	7461.5	7317.2
25°	3922.5	3948.3	3931.1	3974.2	4071.1	4506.2	5514.3	7007.0	8025.9	8073.3	7909.6
27.5°	4323.1	4325.3	4284.3	4282.2	4297.3	4596.7	5563.8	7267.7	8743.2	8831.5	8629.0
30°	5126.6	5094.3	4937.0	4766.8	4689.3	4868.1	5701.7	7575.7	9589.7	9746.9	9492.8
32.5°	6365.1	6317.7	6029.1	5622.0	5212.7	5305.4	5949.4	7926.8	10511.6	10795.9	10485.8
35°	7709.2	7696.3	7394.8	6789.5	6074.3	5927.9	6352.2	8387.8	11517.5	11969.9	11601.6
37.5°	8958.6	8952.1	8779.8	8066.8	7196.6	6795.9	6998.4	8990.9	12594.6	13249.4	12814.3
40°	10100.2	10119.6	9947.3	9309.7	8433.0	7909.6	7877.3	9736.2	13792.2	14643.0	14126.1
42.5°	11086.7	11108.3	10933.8	10462.1	9654.3	9141.7	8956.4	10649.5	14961.8	16140.1	15528.3
45°	11756.6	11890.2	11864.3	11487.4	10908.0	10375.9	10253.1	11795.4	16295.2	17727.6	17010.3
47.5°	11946.2	12069.0	12262.8	12314.5	11961.3	11437.8	11584.3	13176.1	17643.6	19317.3	18500.9
50°	11478.8	11592.9	11995.7	12532.1	12777.6	12616.1	12878.9	14656.0	19024.3	20902.6	19963.5
52.5°	10556.9	10673.2	11181.5	12030.2	13031.8	13540.2	14177.8	16114.2	20362.0	22404.0	21348.5
55°	9223.5	9346.3	9999.0	10959.7	12547.2	13921.4	15261.2	17570.3	21587.6	23754.5	22597.8
57.5°	7409.8	7500.3	8178.8	9522.9	11328.0	13542.3	16060.4	19160.0	22742.1	25081.4	23836.4
60°	4829.3	4909.0	5697.4	7196.6	9307.5	12275.8	16219.8	20932.8	24275.8	26806.8	25505.8
62.5°	3211.6	3265.5	3732.9	4833.6	6554.7	9843.9	15287.1	22348.0	26524.6	29809.5	28368.4
65°	2203.6	2257.4	2724.8	3491.7	4234.8	6511.6	12605.3	22160.6	28562.3	32194.0	30490.2
67.5°	1572.4	1617.7	2014.0	2737.8	3065.2	3782.5	8545.0	19765.3	28269.4	32284.5	30604.3
70°	1126.6	1152.4	1479.8	2132.5	2436.2	2272.5	4751.8	15116.9	24751.8	29811.6	28273.7
72.5°	788.4	797.0	1027.5	1624.1	1962.3	1658.6	2261.7	10078.7	18720.6	23399.1	21919.3
75°	534.2	545.0	691.4	1191.2	1574.6	1266.6	1197.6	5404.4	10989.8	12952.1	11610.2
77.5°	327.4	331.7	445.9	814.2	1178.2	965.0	771.1	2289.7	4252.0	4174.5	3558.4
80°	185.2	185.2	284.3	506.2	803.4	622.5	540.7	973.6	1346.3	1182.6	1042.5
82.5°	103.4	105.5	206.8	314.5	532.0	368.3	297.3	450.2	581.6	514.8	448.0
85°	43.1	47.4	127.1	148.6	254.2	183.1	120.6	189.6	215.4	191.7	140.0
87.5°	4.3	6.5	38.8	28.0	30.2	36.6	17.2	36.6	30.2	30.2	21.5
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°	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4	4956.4
2.5°	4988.7	4956.4	4874.5	4779.8	4654.8	4594.5	4512.7	4456.7	4409.3	4413.6	4370.5
5°	5085.6	5003.8	4820.7	4592.4	4308.0	4105.6	3890.2	3741.5	3620.9	3595.1	3536.9
7.5°	5219.2	5089.9	4769.0	4357.6	3877.2	3513.2	3187.9	2979.0	2830.4	2783.0	2735.6
10°	5391.5	5204.1	4702.2	4062.5	3371.0	2907.9	2559.0	2395.3	2294.0	2259.6	2233.7
12.5°	5591.8	5335.5	4613.9	3702.8	2849.8	2403.9	2182.0	2100.2	2067.9	2057.1	2050.6
15°	5843.9	5499.2	4480.4	3276.3	2408.2	2095.9	2001.1	1990.3	1994.6	1990.3	1988.2
17.5°	6143.3	5678.0	4262.8	2836.8	2110.9	1938.6	1904.2	1912.8	1923.5	1921.4	1917.1
20°	6470.7	5854.6	3984.9	2447.0	1908.5	1826.6	1807.2	1815.8	1824.5	1820.1	1818.0
22.5°	6843.3	6044.2	3676.9	2143.2	1772.8	1723.2	1701.7	1703.8	1703.8	1695.2	1690.9
25°	7289.2	6253.1	3353.8	1927.8	1669.4	1630.6	1604.7	1596.1	1583.2	1557.4	1553.0
27.5°	7821.2	6475.0	3043.6	1777.1	1587.5	1550.9	1520.7	1499.2	1466.9	1423.8	1419.5
30°	8420.1	6744.2	2780.8	1682.3	1522.9	1486.3	1451.8	1419.5	1372.1	1318.3	1314.0
32.5°	9124.4	7032.9	2589.1	1619.8	1464.7	1426.0	1385.0	1346.3	1294.6	1240.7	1242.9
35°	9964.5	7381.8	2477.1	1576.7	1419.5	1367.8	1322.6	1279.5	1240.7	1193.3	1189.0
37.5°	10875.6	7752.3	2442.7	1555.2	1389.3	1309.6	1257.9	1227.8	1223.5	1195.5	1193.3
40°	11873.0	8191.7	2468.5	1542.3	1357.0	1253.6	1197.6	1191.2	1201.9	1152.4	1154.6
42.5°	12928.4	8713.0	2511.6	1527.2	1311.8	1197.6	1143.8	1143.8	1135.2	1066.2	1066.2
45°	14070.1	9314.0	2554.7	1490.6	1257.9	1141.6	1100.7	1085.6	1049.0	982.2	980.1
47.5°	15220.3	9925.7	2587.0	1423.8	1193.3	1094.2	1057.6	1023.2	969.3	909.0	906.8
50°	16312.4	10475.0	2552.5	1324.7	1120.1	1049.0	1010.2	962.8	904.7	863.8	857.3
52.5°	17288.2	10951.0	2406.0	1208.4	1042.5	1001.6	967.2	917.6	870.2	827.1	822.8
55°	18136.8	11336.6	2147.6	1098.6	973.6	960.7	926.2	863.8	799.1	762.5	758.2
57.5°	18951.1	11629.6	1824.5	1008.1	911.2	915.5	863.8	807.8	747.4	708.7	704.4
60°	20034.5	12021.6	1497.0	924.1	844.4	857.3	801.3	760.4	685.0	635.4	629.0
62.5°	21766.4	12631.2	1189.0	820.7	766.8	771.1	747.4	697.9	607.4	549.3	545.0
65°	23140.6	12407.2	937.0	708.7	678.5	685.0	685.0	631.1	534.2	467.4	461.0
67.5°	22985.5	10623.6	747.4	598.8	594.5	598.8	613.9	568.7	473.9	420.0	411.4
70°	21174.0	8450.2	598.8	497.6	517.0	506.2	549.3	519.1	426.5	372.6	366.2
72.5°	17277.4	6087.3	456.7	411.4	396.3	413.6	495.4	467.4	355.4	295.1	288.6
75°	10095.9	3248.3	340.3	325.3	286.5	344.6	439.4	398.5	271.4	217.6	211.1
77.5°	3287.0	1133.0	249.9	239.1	213.2	277.9	374.8	336.0	221.9	172.3	165.9
80°	881.0	342.5	170.2	157.2	137.9	206.8	297.3	267.1	159.4	112.0	109.9
82.5°	353.3	144.3	99.1	88.3	75.4	142.2	234.8	215.4	118.5	71.1	71.1
85°	114.2	47.4	36.6	28.0	34.5	88.3	140.0	146.5	84.0	36.6	28.0
87.5°	15.1	6.5	6.5	8.6	6.5	15.1	43.1	40.9	23.7	4.3	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)