

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: P968783

Luminaire Tested: **NAV-SB5C-735-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968783
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-SB5C-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA 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: 28315.6 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 249.5
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



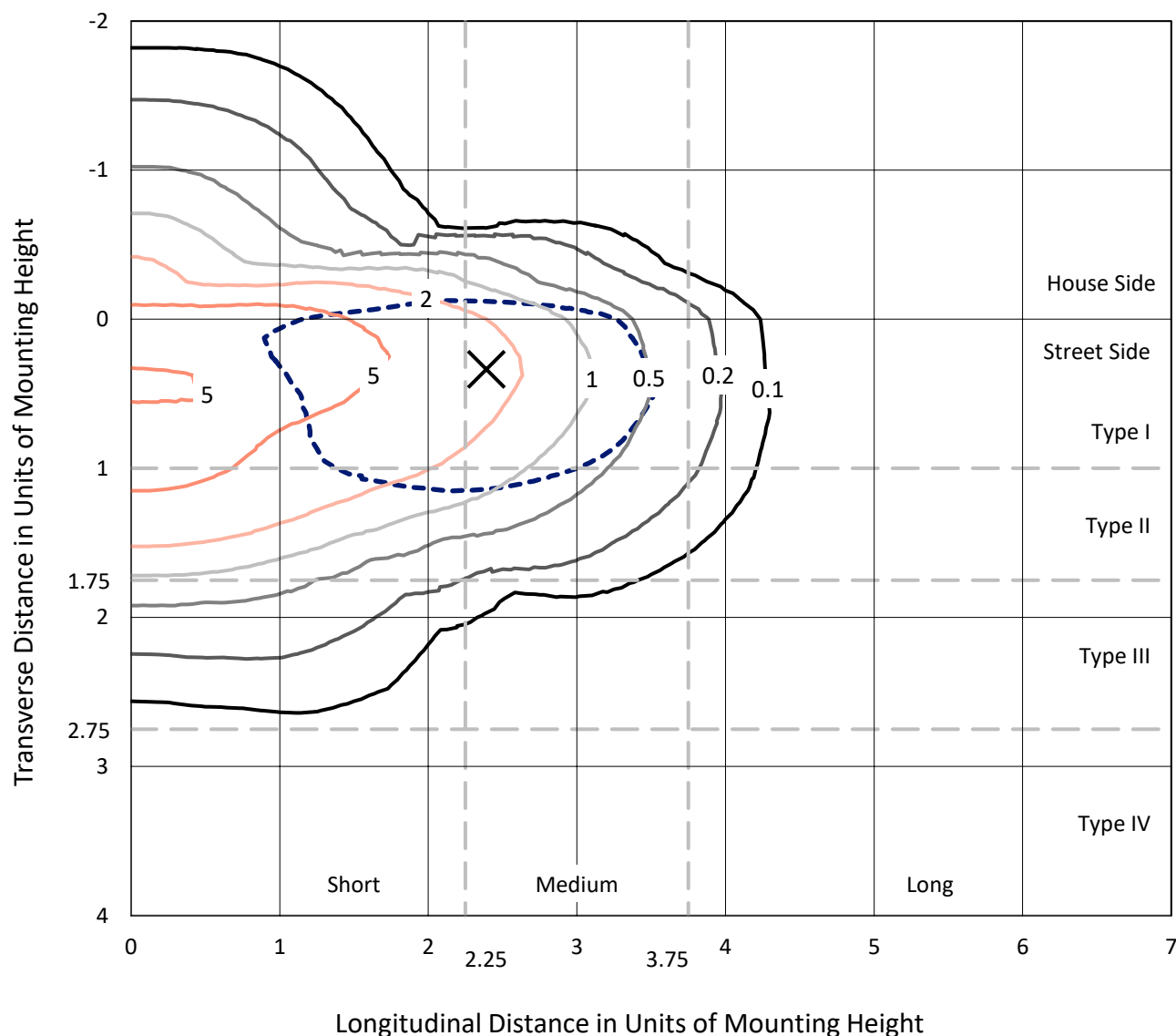
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

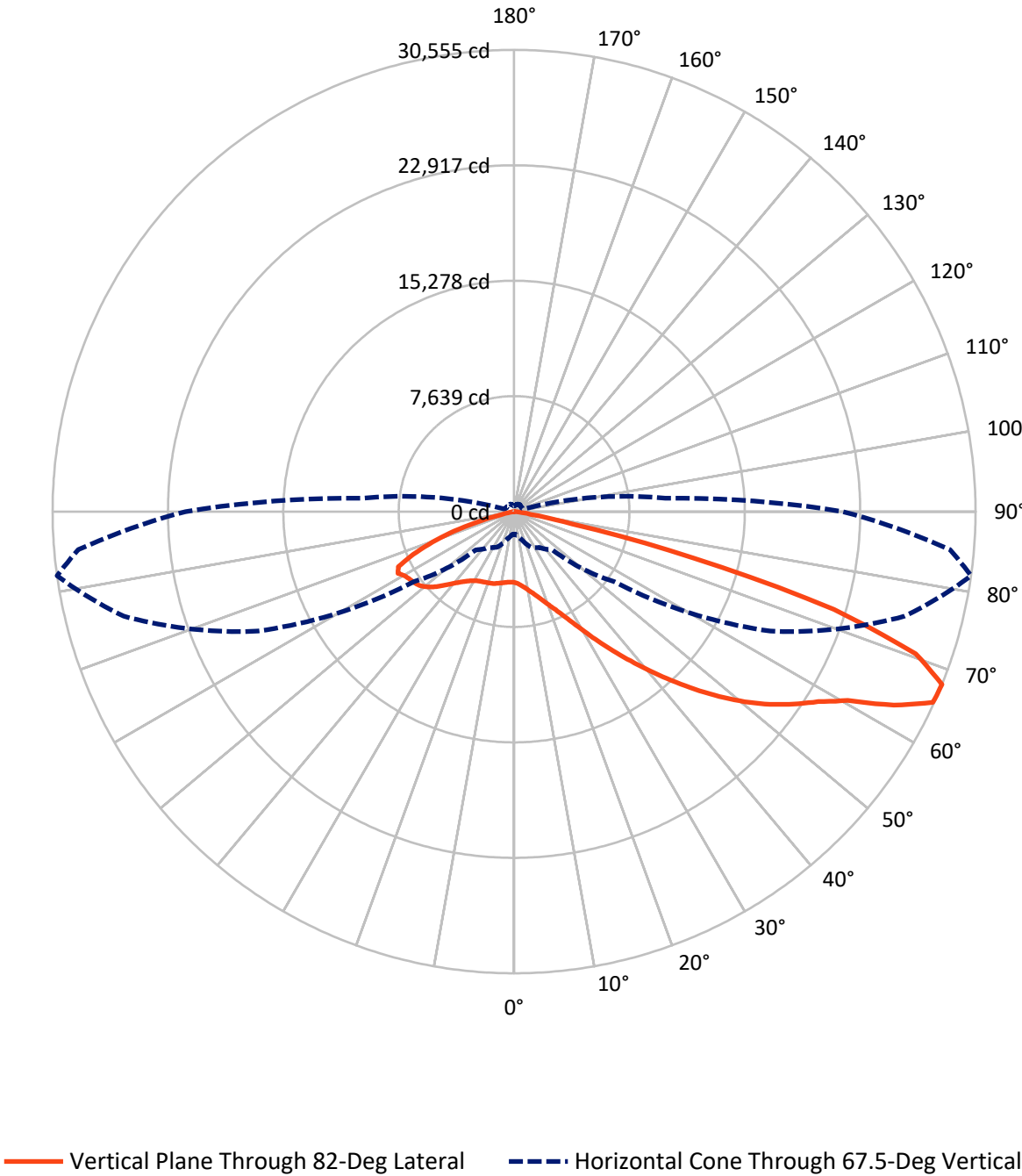
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5129.1	0.0	5129.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	23186.5	0.0	23186.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	28315.6	0.0	28315.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	417.9	1.5
10°-20°	1086.0	3.8
20°-30°	1739.5	6.1
30°-40°	3075.9	10.9
40°-50°	5389.3	19.0
50°-60°	7187.8	25.4
60°-70°	6691.5	23.6
70°-80°	2568.2	9.1
80°-90°	159.5	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°	28315.6	100.0
0°-180°	28315.6	100.0

Coefficient of Utilization



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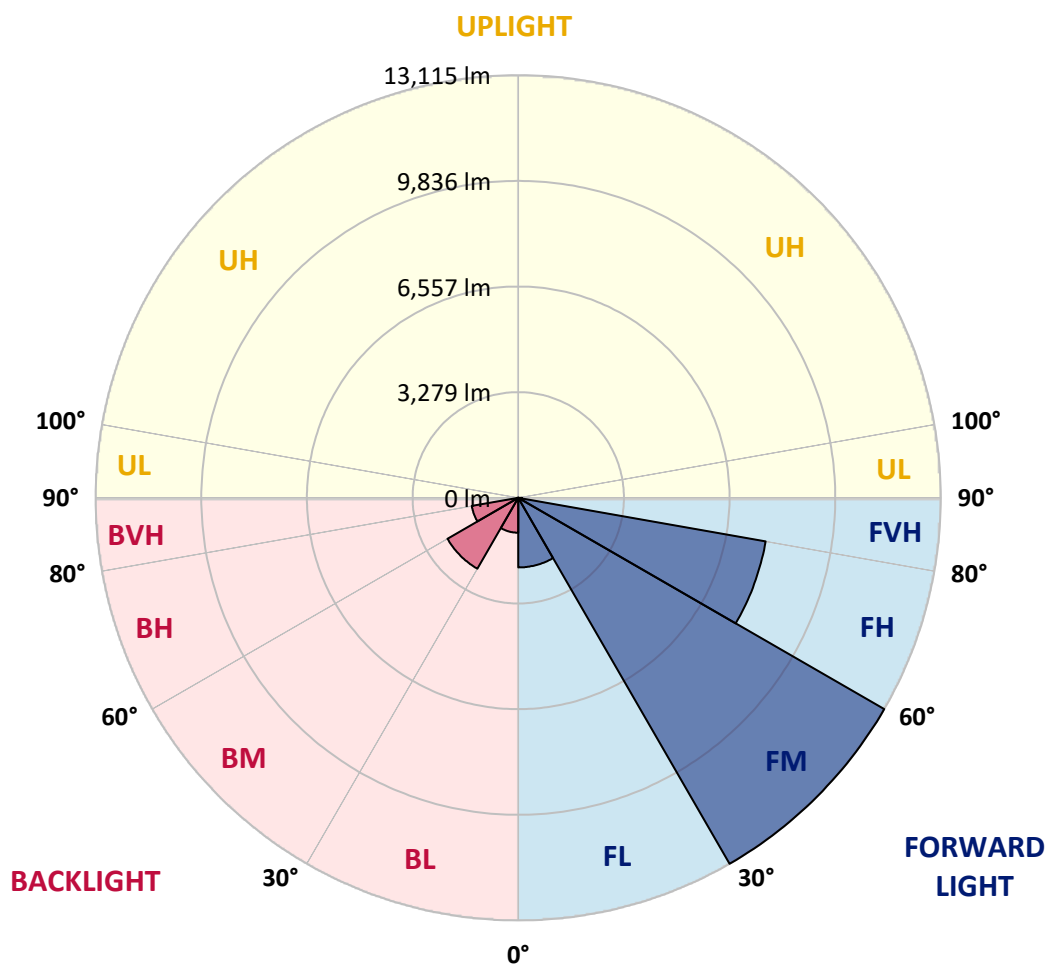
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2160.2	7.6			
FM	(30°-60°)	13114.6	46.3			
FH	(60°-80°)	7795.7	27.5			G4/12000
FVH	(80°-90°)	116.0	0.4			G2/225
BL	(0°-30°)	1083.3	3.8	B3/2500		
BM	(30°-60°)	2538.4	9.0	B3/5000		
BH	(60°-80°)	1464.0	5.2	B3/2500		G3/2500
BVH	(80°-90°)	43.5	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°	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9
2.5°	4958.0	4986.5	4970.2	4962.1	4947.8	4927.4	4911.1	4860.1	4807.1	4772.5	4760.3
5°	5057.9	5086.5	5084.4	5092.5	5102.8	5108.9	5104.8	5047.7	4972.3	4913.1	4878.5
7.5°	4972.3	5004.9	5031.4	5072.2	5143.6	5219.0	5255.7	5243.4	5165.9	5084.4	5041.6
10°	4729.7	4764.3	4827.5	4923.4	5074.2	5237.3	5373.9	5437.1	5388.1	5298.4	5239.3
12.5°	4285.2	4319.9	4444.3	4652.2	4905.0	5188.3	5449.3	5618.5	5630.7	5541.0	5471.8
15°	3785.7	3820.5	3952.9	4213.9	4599.2	5053.9	5490.1	5810.2	5918.2	5840.8	5757.1
17.5°	3475.9	3506.5	3606.4	3816.4	4218.0	4784.7	5475.9	6014.0	6260.7	6199.5	6099.7
20°	3382.1	3408.6	3455.5	3602.3	3936.6	4505.4	5382.1	6205.7	6629.7	6595.1	6482.9
22.5°	3482.0	3506.5	3520.8	3586.0	3796.0	4321.9	5263.8	6401.3	7057.8	7061.9	6925.3
25°	3712.3	3736.8	3720.5	3761.3	3853.1	4264.8	5219.0	6631.7	7596.1	7640.9	7486.0
27.5°	4091.6	4093.6	4054.9	4052.8	4067.1	4350.5	5265.8	6878.4	8274.9	8358.5	8166.9
30°	4852.0	4821.4	4672.6	4511.5	4438.1	4607.4	5396.3	7170.0	9076.1	9224.9	8984.3
32.5°	6024.2	5979.3	5706.2	5320.9	4933.5	5021.2	5630.7	7502.3	9948.6	10217.7	9924.2
35°	7296.4	7284.1	6998.7	6425.8	5749.0	5610.3	6012.0	7938.5	10900.7	11328.8	10980.2
37.5°	8478.8	8472.6	8309.6	7634.7	6811.1	6432.0	6623.6	8509.3	11920.0	12539.7	12127.9
40°	9559.3	9577.6	9414.5	8811.1	7981.4	7486.0	7455.3	9214.8	13053.5	13858.7	13369.5
42.5°	10492.9	10513.3	10348.2	9901.7	9137.3	8652.0	8476.8	10079.1	14160.5	15275.7	14696.7
45°	11127.0	11253.4	11228.9	10872.2	10323.7	9820.2	9704.0	11163.7	15422.5	16778.1	16099.3
47.5°	11306.4	11422.6	11606.1	11655.0	11320.6	10825.2	10963.9	12470.5	16698.6	18282.6	17510.0
50°	10864.0	10972.0	11353.3	11860.9	12093.3	11940.4	12189.1	13871.0	18005.4	19783.1	18894.2
52.5°	9991.4	10101.5	10582.6	11385.9	12333.8	12815.0	13418.4	15251.2	19271.4	21204.1	20205.1
55°	8729.5	8845.8	9463.4	10372.7	11875.1	13175.9	14443.9	16629.3	20431.4	22482.2	21387.5
57.5°	7012.9	7098.6	7740.8	9012.9	10721.3	12817.0	15200.2	18133.8	21524.1	23738.1	22559.7
60°	4570.7	4646.1	5392.2	6811.1	8809.1	11618.3	15351.0	19811.6	22975.6	25371.0	24139.7
62.5°	3039.6	3090.6	3533.0	4574.8	6203.6	9316.6	14468.3	21151.0	25104.0	28212.9	26849.1
65°	2085.6	2136.5	2578.9	3304.7	4008.0	6162.8	11930.2	20973.7	27032.5	30469.7	28857.1
67.5°	1488.2	1531.0	1906.1	2591.1	2901.0	3579.9	8087.4	18706.7	26755.3	30555.4	28965.2
70°	1066.2	1090.7	1400.6	2018.2	2305.7	2150.8	4497.3	14307.3	23426.2	28215.0	26759.4
72.5°	746.1	754.3	972.4	1537.2	1857.2	1569.8	2140.6	9538.9	17717.9	22145.8	20745.4
75°	505.6	515.8	654.4	1127.4	1490.2	1198.7	1133.4	5115.0	10401.2	12258.4	10988.3
77.5°	309.9	314.0	422.0	770.6	1115.1	913.3	729.8	2167.1	4024.3	3950.9	3367.8
80°	175.3	175.3	269.1	479.1	760.4	589.2	511.7	921.5	1274.2	1119.2	986.7
82.5°	97.9	99.9	195.7	297.7	503.6	348.6	281.4	426.1	550.4	487.3	424.0
85°	40.8	44.9	120.2	140.6	240.6	173.3	114.2	179.4	203.9	181.4	132.5
87.5°	4.1	6.1	36.7	26.5	28.5	34.6	16.3	34.6	28.5	28.5	20.4
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°	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9	4690.9
2.5°	4721.6	4690.9	4613.4	4523.7	4405.6	4348.5	4271.0	4218.0	4173.1	4177.2	4136.4
5°	4813.3	4735.8	4562.5	4346.4	4077.3	3885.7	3681.8	3541.2	3427.0	3402.5	3347.4
7.5°	4939.7	4817.3	4513.6	4124.2	3669.6	3325.0	3017.2	2819.5	2678.8	2633.9	2589.0
10°	5102.8	4925.4	4450.3	3844.9	3190.5	2752.2	2421.9	2267.0	2171.2	2138.6	2114.1
12.5°	5292.4	5049.8	4366.8	3504.5	2697.2	2275.1	2065.2	1987.7	1957.1	1946.9	1940.8
15°	5530.9	5204.6	4240.4	3100.8	2279.2	1983.6	1893.9	1883.7	1887.7	1883.7	1881.7
17.5°	5814.2	5373.9	4034.5	2684.9	1997.9	1834.7	1802.2	1810.4	1820.5	1818.5	1814.4
20°	6124.1	5541.0	3771.5	2315.9	1806.3	1728.8	1710.4	1718.6	1726.7	1722.6	1720.7
22.5°	6476.8	5720.4	3480.0	2028.5	1677.8	1630.9	1610.6	1612.5	1612.5	1604.4	1600.3
25°	6898.8	5918.2	3174.2	1824.6	1579.9	1543.2	1518.8	1510.6	1498.4	1473.9	1469.8
27.5°	7402.3	6128.2	2880.7	1681.9	1502.4	1467.8	1439.3	1418.9	1388.4	1347.6	1343.5
30°	7969.1	6383.0	2631.9	1592.2	1441.4	1406.7	1374.0	1343.5	1298.6	1247.6	1243.5
32.5°	8635.7	6656.2	2450.5	1533.1	1386.3	1349.6	1310.9	1274.2	1225.2	1174.2	1176.3
35°	9430.8	6986.5	2344.5	1492.3	1343.5	1294.6	1251.7	1210.9	1174.2	1129.4	1125.3
37.5°	10293.2	7337.2	2311.8	1471.9	1315.0	1239.5	1190.5	1162.0	1157.9	1131.5	1129.4
40°	11237.1	7753.0	2336.3	1459.7	1284.3	1186.5	1133.4	1127.4	1137.5	1090.7	1092.8
42.5°	12236.0	8246.3	2377.1	1445.5	1241.6	1133.4	1082.5	1082.5	1074.4	1009.1	1009.1
45°	13316.5	8815.1	2417.9	1410.7	1190.5	1080.5	1041.7	1027.5	992.8	929.7	927.6
47.5°	14405.1	9394.1	2448.4	1347.6	1129.4	1035.7	1001.0	968.3	917.4	860.3	858.2
50°	15438.8	9914.0	2415.8	1253.8	1060.1	992.8	956.1	911.3	856.3	817.5	811.4
52.5°	16362.3	10364.5	2277.1	1143.7	986.7	948.0	915.3	868.5	823.6	782.8	778.8
55°	17165.5	10729.4	2032.6	1039.8	921.5	909.3	876.6	817.5	756.3	721.7	717.6
57.5°	17936.1	11006.7	1726.7	954.1	862.3	866.4	817.5	764.4	707.5	670.8	666.7
60°	18961.5	11377.7	1416.9	874.6	799.2	811.4	758.4	719.7	648.3	601.4	595.3
62.5°	20600.6	11954.7	1125.3	776.7	725.8	729.8	707.5	660.5	574.9	519.9	515.8
65°	21901.3	11742.6	886.8	670.8	642.2	648.3	648.3	597.4	505.6	442.4	436.2
67.5°	21754.5	10054.6	707.5	566.7	562.6	566.7	581.0	538.2	448.5	397.5	389.4
70°	20040.0	7997.7	566.7	470.9	489.2	479.1	519.9	491.3	403.6	352.7	346.6
72.5°	16352.0	5761.2	432.2	389.4	375.2	391.4	468.9	442.4	336.4	279.3	273.2
75°	9555.2	3074.3	322.2	307.8	271.1	326.2	415.8	377.2	256.9	205.9	199.8
77.5°	3111.0	1072.4	236.5	226.3	201.8	263.0	354.8	318.1	210.0	163.1	156.9
80°	833.8	324.1	161.0	148.8	130.5	195.7	281.4	252.8	150.9	106.0	103.9
82.5°	334.4	136.6	93.8	83.5	71.3	134.6	222.2	203.9	112.1	67.2	67.2
85°	108.0	44.9	34.6	26.5	32.6	83.5	132.5	138.6	79.5	34.6	26.5
87.5°	14.2	6.1	6.1	8.2	6.1	14.2	40.8	38.7	22.4	4.1	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)