

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: P964071

Luminaire Tested: **NAV-SB3B-740-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964071
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-SB3B-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA 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: 13379.3 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 109.2
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

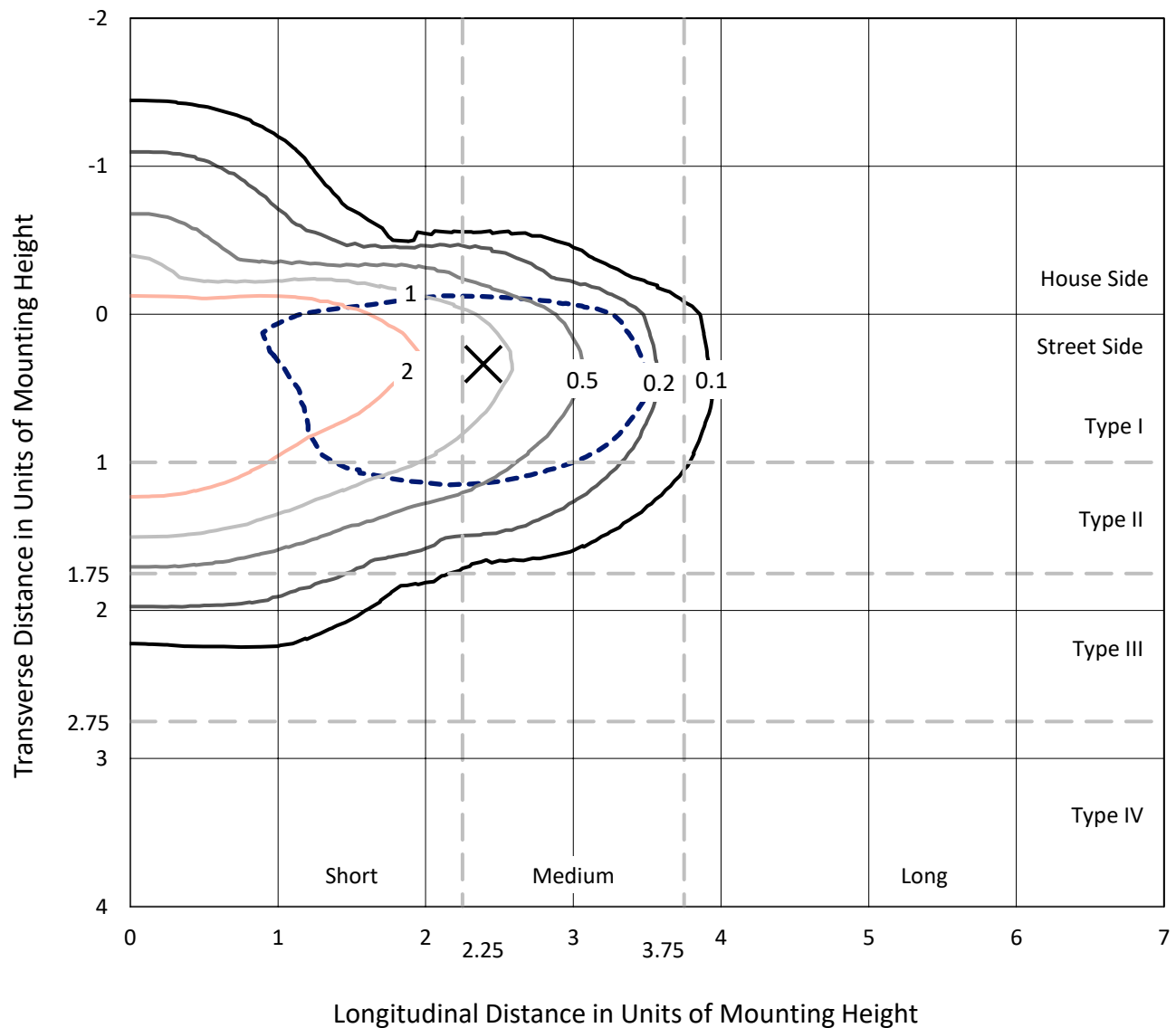


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Iso-Footcandle Lines of Horizontal Illumination

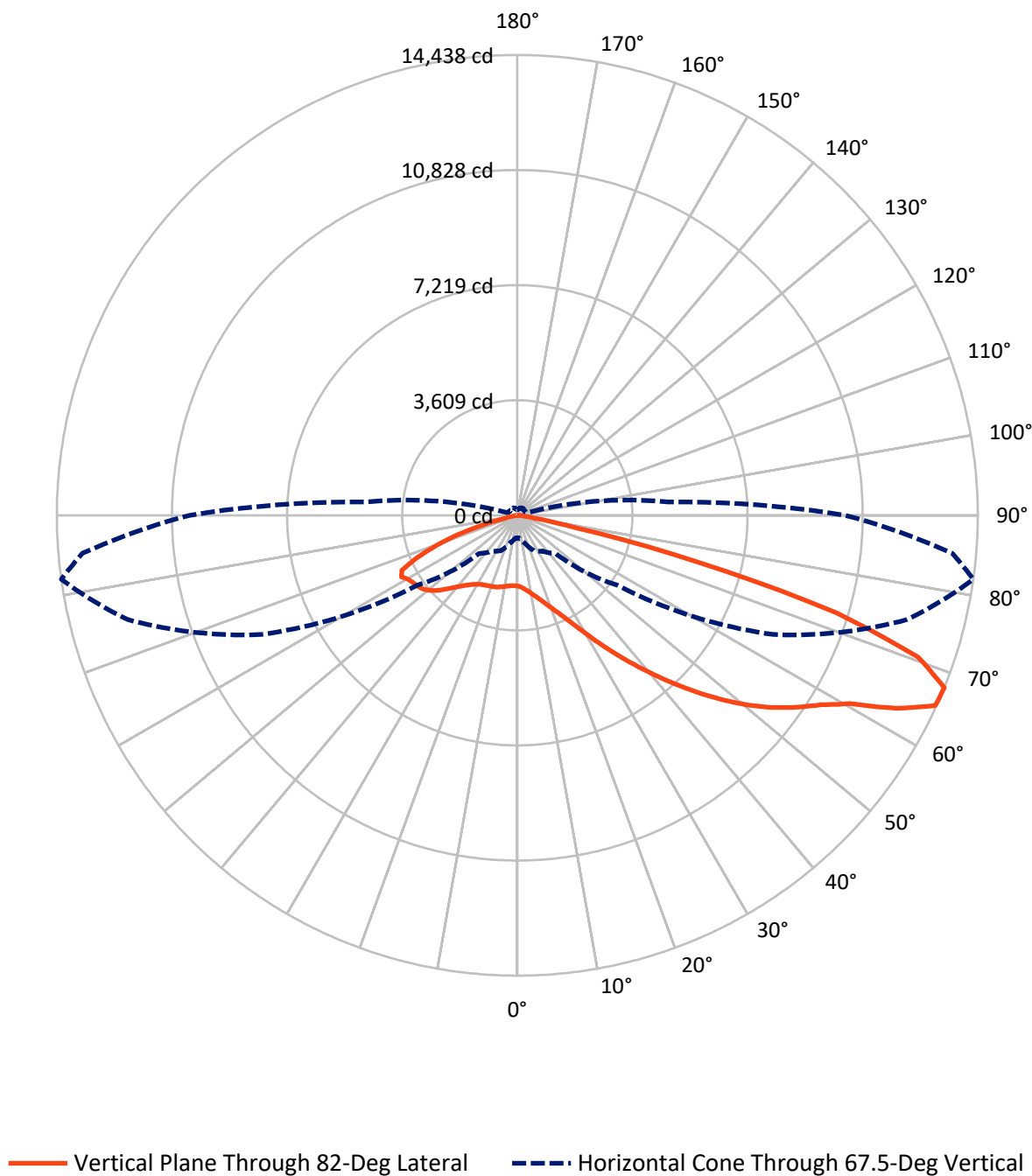
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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	2423.5	0.0	2423.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	10955.8	0.0	10955.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	13379.3	0.0	13379.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.5	1.5
10°-20°	513.2	3.8
20°-30°	821.9	6.1
30°-40°	1453.4	10.9
40°-50°	2546.5	19.0
50°-60°	3396.3	25.4
60°-70°	3161.8	23.6
70°-80°	1213.5	9.1
80°-90°	75.4	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°	13379.3	100.0
0°-180°	13379.3	100.0

Coefficient of Utilization



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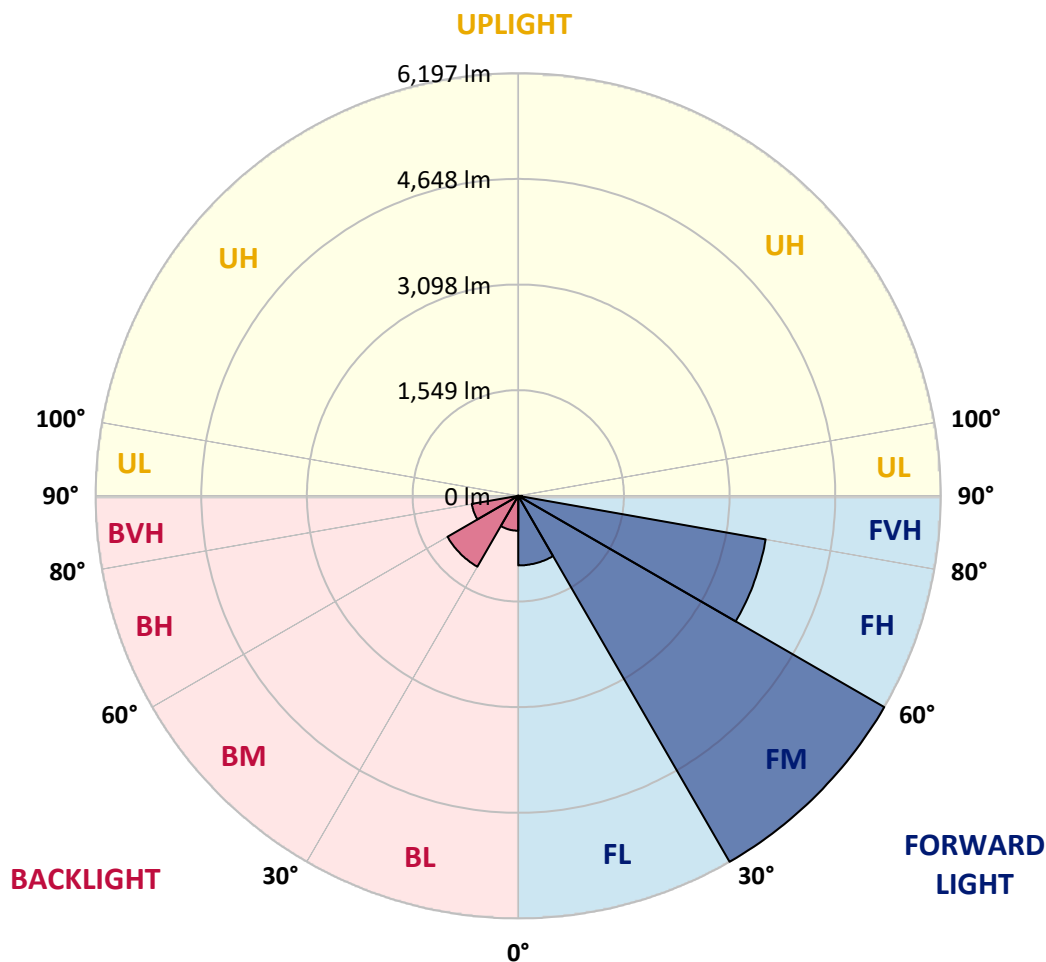
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1020.7	7.6			
FM	(30°-60°)	6196.8	46.3			
FH	(60°-80°)	3683.5	27.5			G2/5000
FVH	(80°-90°)	54.8	0.4			G1/100
BL	(0°-30°)	511.8	3.8	B2/1000		
BM	(30°-60°)	1199.4	9.0	B2/2500		
BH	(60°-80°)	691.7	5.2	B2/1000		G2/1000
BVH	(80°-90°)	20.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5
2.5°	2342.7	2356.2	2348.5	2344.6	2337.9	2328.3	2320.5	2296.4	2271.4	2255.0	2249.3
5°	2389.9	2403.4	2402.4	2406.3	2411.1	2414.0	2412.0	2385.1	2349.4	2321.5	2305.1
7.5°	2349.4	2364.9	2377.4	2396.7	2430.4	2465.9	2483.4	2477.5	2440.9	2402.4	2382.2
10°	2234.8	2251.2	2281.0	2326.3	2397.6	2474.7	2539.2	2569.1	2545.9	2503.6	2475.6
12.5°	2024.8	2041.2	2099.9	2198.2	2317.6	2451.5	2574.8	2654.7	2660.6	2618.2	2585.5
15°	1788.8	1805.2	1867.8	1991.1	2173.2	2387.9	2594.1	2745.4	2796.4	2759.8	2720.2
17.5°	1642.4	1656.8	1704.1	1803.3	1993.0	2260.8	2587.4	2841.7	2958.3	2929.3	2882.1
20°	1598.1	1610.6	1632.7	1702.1	1860.1	2128.8	2543.0	2932.2	3132.6	3116.2	3063.2
22.5°	1645.2	1656.8	1663.6	1694.4	1793.6	2042.1	2487.2	3024.7	3334.8	3336.8	3272.2
25°	1754.1	1765.7	1758.0	1777.2	1820.6	2015.2	2465.9	3133.5	3589.1	3610.4	3537.2
27.5°	1933.3	1934.3	1915.9	1915.0	1921.8	2055.6	2488.2	3250.1	3910.0	3949.4	3858.9
30°	2292.6	2278.2	2207.8	2131.7	2097.0	2177.0	2549.8	3387.8	4288.5	4358.8	4245.1
32.5°	2846.5	2825.3	2696.3	2514.1	2331.2	2372.6	2660.6	3544.9	4700.8	4828.0	4689.3
35°	3447.6	3441.7	3307.0	3036.3	2716.5	2651.0	2840.7	3751.0	5150.6	5353.0	5188.2
37.5°	4006.3	4003.3	3926.4	3607.5	3218.3	3039.1	3129.7	4020.8	5632.3	5925.1	5730.6
40°	4516.8	4525.5	4448.4	4163.2	3771.2	3537.2	3522.7	4354.0	6167.8	6548.3	6317.2
42.5°	4958.0	4967.7	4889.6	4678.6	4317.4	4088.1	4005.3	4762.5	6690.9	7217.8	6944.3
45°	5257.5	5317.3	5305.7	5137.2	4878.1	4640.1	4585.2	5275.0	7287.2	7927.8	7607.0
47.5°	5342.3	5397.2	5484.0	5507.0	5349.1	5115.0	5180.6	5892.4	7890.2	8638.7	8273.6
50°	5133.3	5184.3	5364.5	5604.4	5714.2	5641.9	5759.5	6554.2	8507.7	9347.7	8927.6
52.5°	4721.0	4773.0	5000.4	5379.9	5827.8	6055.2	6340.3	7206.3	9105.9	10019.1	9547.1
55°	4124.8	4179.6	4471.6	4901.1	5611.1	6225.6	6824.9	7857.4	9654.0	10623.0	10105.8
57.5°	3313.7	3354.1	3657.6	4258.7	5065.9	6056.1	7182.2	8568.4	10170.3	11216.4	10659.6
60°	2159.7	2195.3	2547.8	3218.3	4162.3	5489.7	7253.5	9361.1	10856.2	11988.0	11406.2
62.5°	1436.2	1460.3	1669.3	2161.6	2931.3	4402.2	6836.3	9994.0	11861.8	13330.8	12686.3
65°	985.4	1009.5	1218.5	1561.5	1893.8	2912.0	5637.1	9910.2	12773.0	14397.2	13635.2
67.5°	703.2	723.4	900.7	1224.4	1370.7	1691.6	3821.3	8839.0	12642.0	14437.6	13686.2
70°	503.8	515.4	661.7	953.7	1089.5	1016.3	2125.0	6760.3	11069.0	13331.8	12644.0
72.5°	352.6	356.4	459.5	726.3	877.5	741.7	1011.5	4507.1	8371.9	10464.1	9802.3
75°	238.9	243.7	309.2	532.7	704.2	566.4	535.6	2416.8	4914.7	5792.2	5192.0
77.5°	146.4	148.3	199.4	364.1	527.0	431.5	344.8	1024.0	1901.5	1866.8	1591.3
80°	82.8	82.8	127.2	226.3	359.3	278.4	241.8	435.4	602.1	528.8	466.3
82.5°	46.2	47.2	92.5	140.6	237.9	164.7	132.9	201.3	260.0	230.2	200.4
85°	19.3	21.2	56.8	66.4	113.7	81.9	53.9	84.8	96.4	85.7	62.6
87.5°	1.9	2.9	17.3	12.5	13.5	16.4	7.7	16.4	13.5	13.5	9.6
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°	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5	2216.5
2.5°	2230.9	2216.5	2179.9	2137.5	2081.7	2054.7	2018.0	1993.0	1971.8	1973.7	1954.5
5°	2274.3	2237.7	2155.8	2053.7	1926.6	1836.0	1739.6	1673.2	1619.3	1607.7	1581.7
7.5°	2334.0	2276.2	2132.7	1948.7	1733.9	1571.1	1425.7	1332.2	1265.8	1244.6	1223.3
10°	2411.1	2327.3	2102.8	1816.7	1507.6	1300.4	1144.4	1071.1	1025.9	1010.4	999.0
12.5°	2500.7	2386.0	2063.3	1655.9	1274.4	1075.0	975.8	939.2	924.8	919.9	917.1
15°	2613.3	2459.3	2003.6	1465.1	1077.0	937.3	894.9	890.1	892.0	890.1	889.1
17.5°	2747.3	2539.2	1906.3	1268.6	944.0	866.9	851.6	855.4	860.2	859.3	857.3
20°	2893.7	2618.2	1782.1	1094.3	853.4	816.8	808.2	812.0	815.9	814.0	813.0
22.5°	3060.3	2702.9	1644.3	958.5	792.7	770.6	761.0	762.0	762.0	758.1	756.1
25°	3259.7	2796.4	1499.8	862.1	746.5	729.2	717.6	713.8	708.0	696.5	694.5
27.5°	3497.7	2895.6	1361.1	794.7	709.9	693.5	680.1	670.5	656.0	636.7	634.8
30°	3765.4	3016.1	1243.6	752.3	681.0	664.7	649.2	634.8	613.6	589.5	587.6
32.5°	4080.4	3145.1	1157.8	724.4	655.1	637.7	619.4	602.1	578.9	554.8	555.9
35°	4456.1	3301.1	1107.8	705.1	634.8	611.7	591.4	572.2	554.8	533.6	531.8
37.5°	4863.6	3466.9	1092.3	695.5	621.4	585.7	562.5	549.1	547.1	534.6	533.6
40°	5309.6	3663.4	1103.9	689.7	606.9	560.7	535.6	532.7	537.5	515.4	516.3
42.5°	5781.6	3896.4	1123.2	683.0	586.6	535.6	511.5	511.5	507.7	476.8	476.8
45°	6292.2	4165.2	1142.5	666.6	562.5	510.6	492.2	485.5	469.1	439.2	438.3
47.5°	6806.5	4438.8	1156.9	636.7	533.6	489.3	472.9	457.6	433.5	406.5	405.5
50°	7294.9	4684.5	1141.4	592.4	500.9	469.1	451.8	430.6	404.6	386.3	383.3
52.5°	7731.3	4897.3	1075.9	540.4	466.3	447.9	432.6	410.3	389.2	369.9	368.0
55°	8110.8	5069.8	960.4	491.3	435.4	429.6	414.2	386.3	357.4	341.0	339.1
57.5°	8474.9	5200.7	815.9	450.8	407.4	409.4	386.3	361.2	334.3	316.9	315.0
60°	8959.4	5376.0	669.4	413.3	377.6	383.3	358.3	340.0	306.4	284.1	281.3
62.5°	9733.9	5648.7	531.8	367.1	343.0	344.8	334.3	312.1	271.6	245.6	243.7
65°	10348.5	5548.4	419.0	316.9	303.4	306.4	306.4	282.3	238.9	209.0	206.1
67.5°	10279.1	4750.9	334.3	267.8	265.9	267.8	274.5	254.3	212.0	187.9	184.0
70°	9469.1	3779.0	267.8	222.5	231.1	226.3	245.6	232.2	190.8	166.7	163.8
72.5°	7726.4	2722.2	204.2	184.0	177.2	184.9	221.6	209.0	159.0	132.0	129.0
75°	4514.9	1452.6	152.2	145.4	128.1	154.2	196.5	178.2	121.4	97.3	94.4
77.5°	1470.0	506.7	111.7	106.9	95.3	124.2	167.6	150.3	99.2	77.1	74.2
80°	394.0	153.1	76.1	70.3	61.6	92.5	132.9	119.4	71.2	50.1	49.1
82.5°	158.0	64.6	44.3	39.5	33.7	63.6	105.0	96.4	53.0	31.8	31.8
85°	51.0	21.2	16.4	12.5	15.4	39.5	62.6	65.5	37.6	16.4	12.5
87.5°	6.8	2.9	2.9	3.9	2.9	6.8	19.3	18.3	10.6	1.9	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)