

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: P967667

Luminaire Tested: **NAV-SB5A-727-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967667
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-SB5A-727-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 350mA 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: 15731.7 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

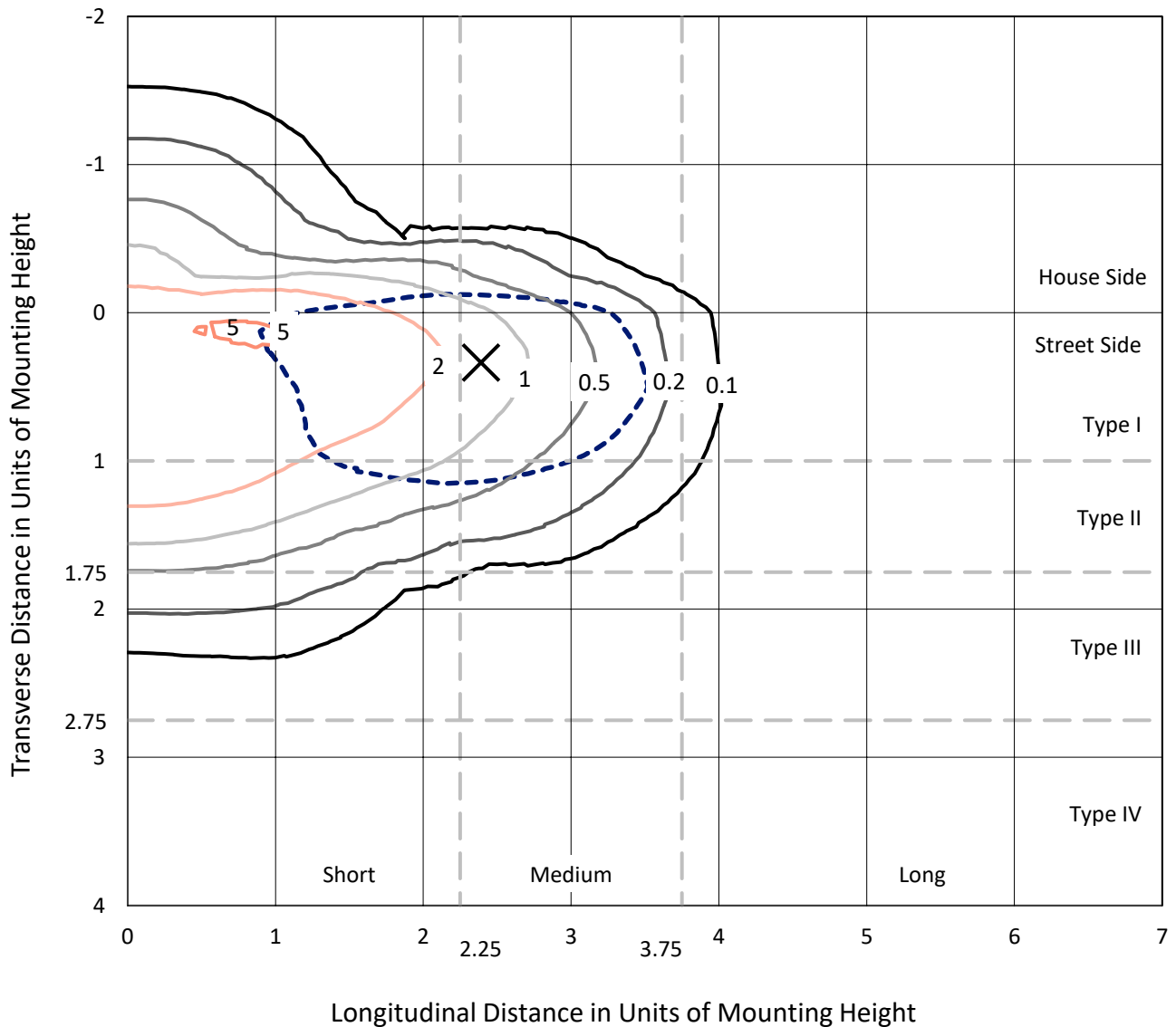
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

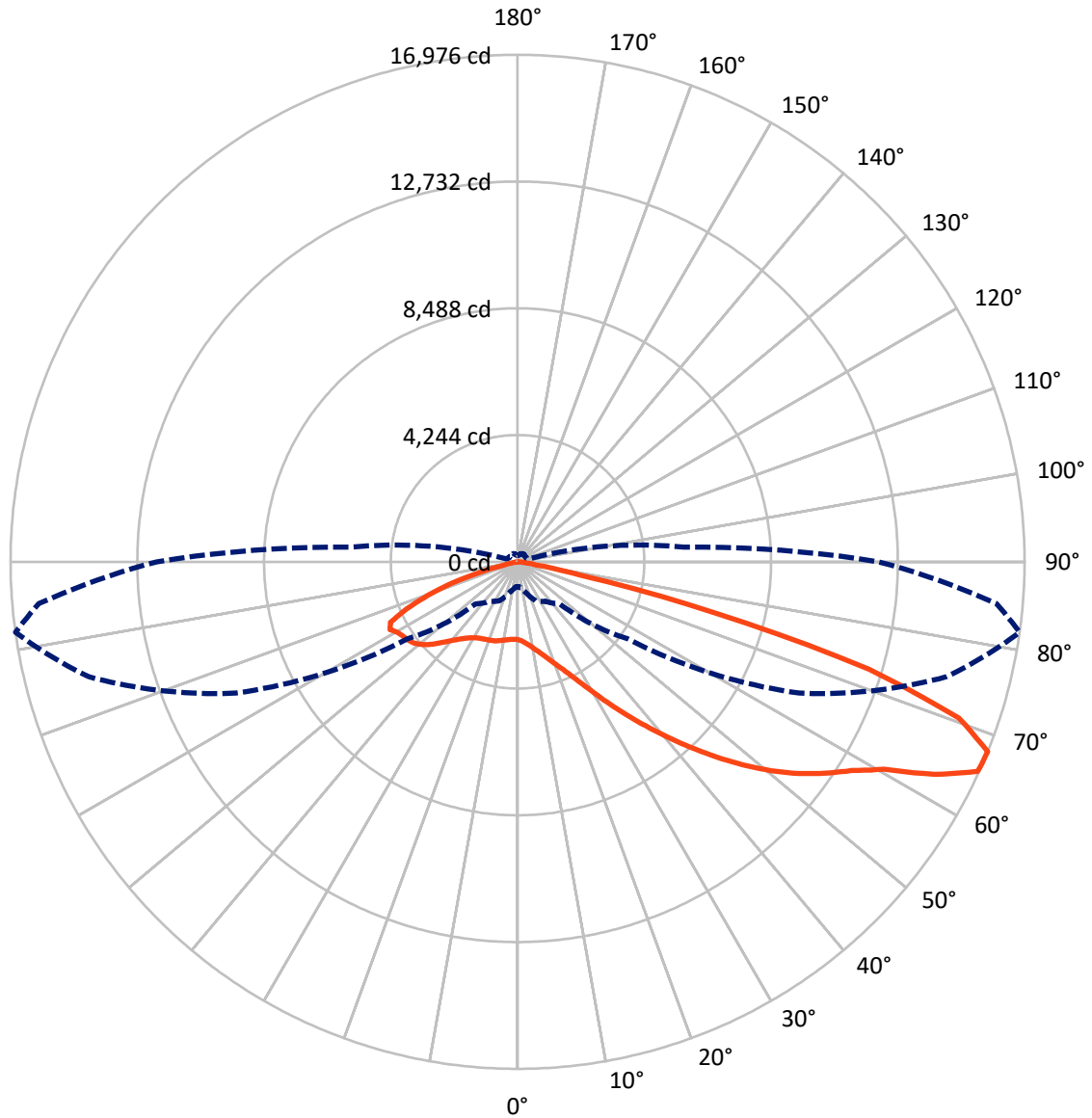
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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	2849.7	0.0	2849.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	12882.0	0.0	12882.0
	% Fixture	81.9	0.0	81.9
Total	Lumens	15731.7	0.0	15731.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.2	1.5
10°-20°	603.4	3.8
20°-30°	966.4	6.1
30°-40°	1708.9	10.9
40°-50°	2994.2	19.0
50°-60°	3993.4	25.4
60°-70°	3717.7	23.6
70°-80°	1426.9	9.1
80°-90°	88.6	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°	15731.7	100.0
0°-180°	15731.7	100.0

Coefficient of Utilization



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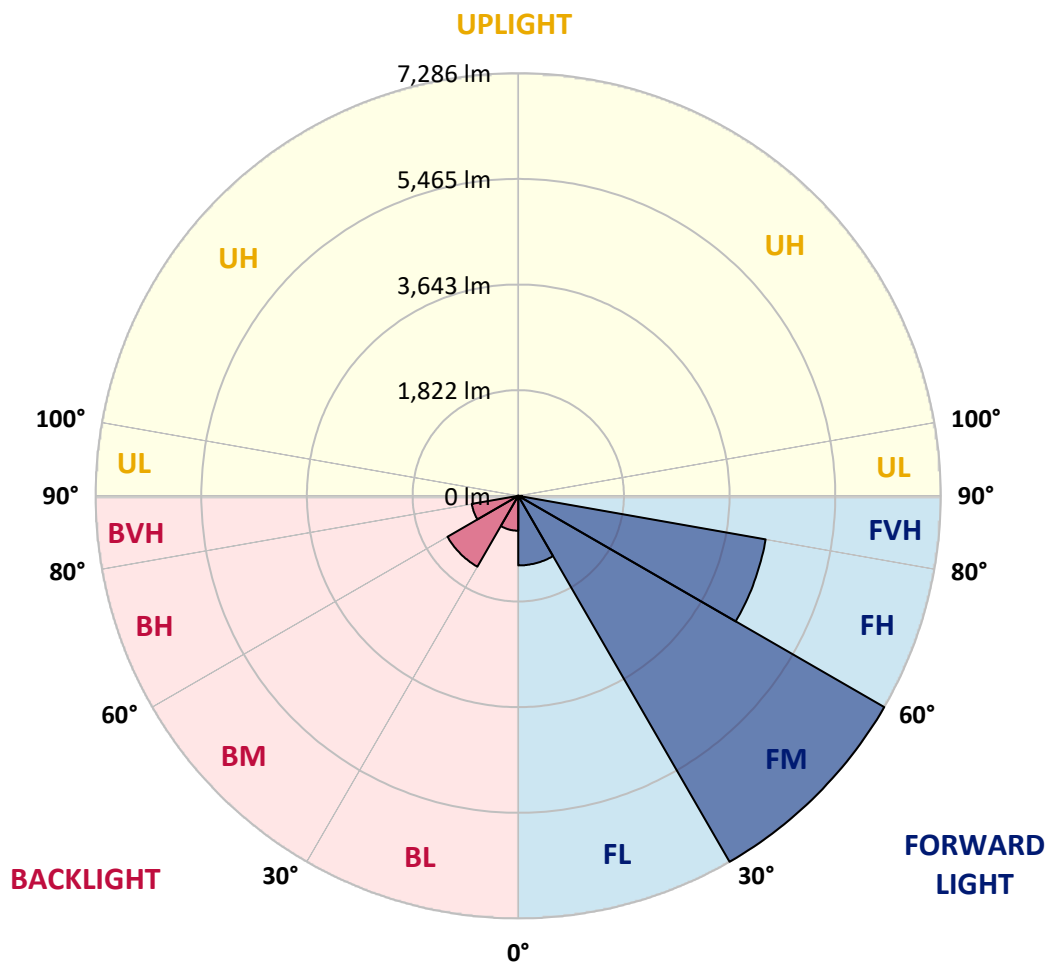
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1200.2	7.6			
FM (30°-60°)	7286.3	46.3			
FH (60°-80°)	4331.2	27.5			G2/5000
FVH (80°-90°)	64.4	0.4			G1/100
BL (0°-30°)	601.8	3.8	B2/1000		
BM (30°-60°)	1410.3	9.0	B2/2500		
BH (60°-80°)	813.4	5.2	B2/1000		G2/1000
BVH (80°-90°)	24.2	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°	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2
2.5°	2754.6	2770.5	2761.4	2756.8	2748.9	2737.6	2728.5	2700.3	2670.7	2651.5	2644.7
5°	2810.0	2825.9	2824.8	2829.3	2835.0	2838.4	2836.2	2804.4	2762.5	2729.7	2710.4
7.5°	2762.5	2780.6	2795.4	2818.0	2857.7	2899.5	2919.9	2913.2	2870.1	2824.8	2801.0
10°	2627.7	2647.0	2682.1	2735.3	2819.2	2909.8	2985.6	3020.8	2993.6	2943.7	2910.9
12.5°	2380.8	2400.0	2469.1	2584.6	2725.2	2882.6	3027.5	3121.5	3128.4	3078.5	3040.0
15°	2103.3	2122.6	2196.2	2341.2	2555.2	2807.8	3050.2	3228.0	3288.1	3245.0	3198.6
17.5°	1931.2	1948.1	2003.7	2120.3	2343.5	2658.3	3042.3	3341.3	3478.3	3444.4	3388.9
20°	1879.0	1893.8	1919.8	2001.4	2187.1	2503.2	2990.1	3447.8	3683.3	3664.1	3601.8
22.5°	1934.6	1948.1	1956.1	1992.3	2108.9	2401.2	2924.5	3556.5	3921.2	3923.5	3847.5
25°	2062.5	2076.1	2067.1	2089.8	2140.7	2369.5	2899.5	3684.5	4220.2	4245.1	4159.0
27.5°	2273.2	2274.4	2252.8	2251.7	2259.6	2417.1	2925.7	3821.5	4597.4	4643.9	4537.4
30°	2695.6	2678.7	2596.0	2506.5	2465.7	2559.7	2998.1	3983.5	5042.5	5125.2	4991.5
32.5°	3346.9	3322.0	3170.2	2956.2	2741.0	2789.7	3128.4	4168.2	5527.3	5676.8	5513.7
35°	4053.8	4046.9	3888.3	3570.1	3194.0	3117.0	3340.2	4410.5	6056.2	6294.1	6100.4
37.5°	4710.7	4707.3	4616.6	4241.8	3784.2	3573.5	3680.0	4727.6	6622.5	6966.9	6738.0
40°	5310.9	5321.2	5230.6	4895.3	4434.3	4159.0	4142.0	5119.6	7252.3	7699.7	7427.9
42.5°	5829.7	5841.1	5749.3	5501.3	5076.5	4806.9	4709.6	5599.8	7867.3	8486.9	8165.3
45°	6182.0	6252.2	6238.6	6040.4	5735.7	5456.0	5391.4	6202.4	8568.5	9321.7	8944.5
47.5°	6281.6	6346.2	6448.2	6475.3	6289.6	6014.3	6091.4	6928.4	9277.5	10157.5	9728.3
50°	6035.8	6095.9	6307.6	6589.7	6718.9	6633.9	6772.1	7706.5	10003.5	10991.2	10497.3
52.5°	5551.1	5612.3	5879.5	6325.8	6852.5	7119.8	7455.0	8473.3	10706.8	11780.6	11225.6
55°	4850.0	4914.6	5257.7	5762.9	6597.6	7320.2	8024.7	9238.9	11351.4	12490.8	11882.5
57.5°	3896.3	3943.9	4300.6	5007.4	5956.6	7120.9	8445.0	10074.8	11958.5	13188.5	12533.8
60°	2539.3	2581.3	2995.9	3784.2	4894.2	6454.9	8528.8	11007.1	12764.8	14095.7	13411.6
62.5°	1688.8	1717.1	1962.9	2541.7	3446.7	5176.1	8038.4	11751.2	13947.4	15674.6	14916.9
65°	1158.7	1187.1	1432.7	1836.0	2226.8	3424.0	6628.3	11652.6	15018.8	16928.5	16032.5
67.5°	826.9	850.6	1059.0	1439.6	1611.7	1988.9	4493.2	10393.1	14864.8	16976.0	16092.6
70°	592.3	606.0	778.1	1121.4	1281.0	1194.9	2498.6	7948.9	13015.2	15675.7	14867.1
72.5°	414.5	419.1	540.3	854.0	1031.9	872.2	1189.3	5299.7	9843.8	12303.9	11525.8
75°	280.8	286.6	363.6	626.4	828.0	666.0	629.8	2841.8	5778.7	6810.6	6104.9
77.5°	172.2	174.5	234.4	428.1	619.5	507.4	405.5	1204.0	2235.8	2195.0	1871.1
80°	97.4	97.4	149.5	266.2	422.5	327.3	284.3	512.0	707.9	621.9	548.2
82.5°	54.3	55.5	108.8	165.3	279.7	193.7	156.3	236.7	305.9	270.7	235.5
85°	22.7	24.9	66.8	78.1	133.7	96.2	63.4	99.6	113.3	100.8	73.6
87.5°	2.3	3.4	20.4	14.8	15.9	19.3	9.0	19.3	15.9	15.9	11.4
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°	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2	2606.2
2.5°	2623.2	2606.2	2563.2	2513.3	2447.6	2415.9	2372.9	2343.5	2318.5	2320.8	2298.2
5°	2674.1	2631.2	2534.8	2414.8	2265.2	2158.9	2045.6	1967.4	1903.9	1890.4	1859.8
7.5°	2744.4	2676.5	2507.7	2291.3	2038.7	1847.4	1676.3	1566.4	1488.3	1463.4	1438.5
10°	2835.0	2736.4	2472.6	2136.2	1772.6	1529.1	1345.6	1259.5	1206.2	1188.2	1174.5
12.5°	2940.3	2805.5	2426.1	1947.0	1498.4	1264.0	1147.4	1104.3	1087.3	1081.7	1078.3
15°	3072.8	2891.6	2355.9	1722.7	1266.3	1102.1	1052.3	1046.5	1048.8	1046.5	1045.4
17.5°	3230.3	2985.6	2241.5	1491.7	1110.0	1019.4	1001.2	1005.8	1011.5	1010.3	1008.1
20°	3402.5	3078.5	2095.4	1286.7	1003.5	960.5	950.3	954.8	959.3	957.0	955.9
22.5°	3598.4	3178.2	1933.5	1127.0	932.1	906.1	894.8	896.0	896.0	891.3	889.1
25°	3832.9	3288.1	1763.5	1013.7	877.8	857.4	843.8	839.3	832.5	818.9	816.6
27.5°	4112.6	3404.7	1600.4	934.4	834.8	815.5	799.6	788.3	771.3	748.7	746.4
30°	4427.5	3546.3	1462.3	884.6	800.7	781.6	763.4	746.4	721.5	693.2	691.0
32.5°	4797.9	3698.1	1361.4	851.8	770.2	749.8	728.3	707.9	680.7	652.4	653.5
35°	5239.6	3881.6	1302.6	829.1	746.4	719.2	695.5	672.8	652.4	627.5	625.2
37.5°	5718.7	4076.4	1284.4	817.7	730.5	688.7	661.4	645.6	643.3	628.6	627.5
40°	6243.2	4307.5	1298.0	811.0	713.6	659.2	629.8	626.4	632.0	606.0	607.1
42.5°	6798.1	4581.5	1320.6	803.1	689.8	629.8	601.5	601.5	596.9	560.7	560.7
45°	7398.4	4897.6	1343.4	783.8	661.4	600.3	578.8	570.8	551.6	516.5	515.4
47.5°	8003.3	5219.2	1360.3	748.7	627.5	575.3	556.2	538.0	509.7	478.0	476.8
50°	8577.5	5508.0	1342.1	696.6	589.0	551.6	531.3	506.2	475.7	454.2	450.8
52.5°	9090.6	5758.3	1265.2	635.4	548.2	526.6	508.6	482.5	457.6	434.9	432.7
55°	9536.8	5961.1	1129.2	577.7	512.0	505.1	487.1	454.2	420.2	401.0	398.7
57.5°	9964.9	6115.2	959.3	530.0	479.1	481.3	454.2	424.8	393.0	372.7	370.3
60°	10534.7	6321.3	787.2	486.0	444.0	450.8	421.4	399.9	360.2	334.2	330.8
62.5°	11445.4	6641.8	625.2	431.5	403.2	405.5	393.0	367.0	319.4	288.8	286.6
65°	12168.0	6524.0	492.7	372.7	356.8	360.2	360.2	331.9	280.8	245.8	242.4
67.5°	12086.4	5586.1	393.0	314.9	312.6	314.9	322.8	299.0	249.2	220.9	216.4
70°	11133.9	4443.4	314.9	261.7	271.8	266.2	288.8	273.0	224.3	196.0	192.6
72.5°	9084.9	3200.9	240.2	216.4	208.4	217.5	260.6	245.8	186.9	155.2	151.8
75°	5308.7	1708.1	179.0	171.1	150.7	181.2	231.0	209.5	142.7	114.4	111.0
77.5°	1728.5	595.7	131.4	125.8	112.1	146.1	197.1	176.7	116.6	90.6	87.2
80°	463.3	180.1	89.5	82.7	72.5	108.8	156.3	140.4	83.8	58.9	57.8
82.5°	185.7	75.8	52.1	46.4	39.7	74.7	123.4	113.3	62.3	37.4	37.4
85°	60.1	24.9	19.3	14.8	18.1	46.4	73.6	77.0	44.2	19.3	14.8
87.5°	7.9	3.4	3.4	4.5	3.4	7.9	22.7	21.5	12.5	2.3	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)