

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: P968907

Luminaire Tested: **NAV-SB5C-827-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968907
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-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 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: 24622.5 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

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



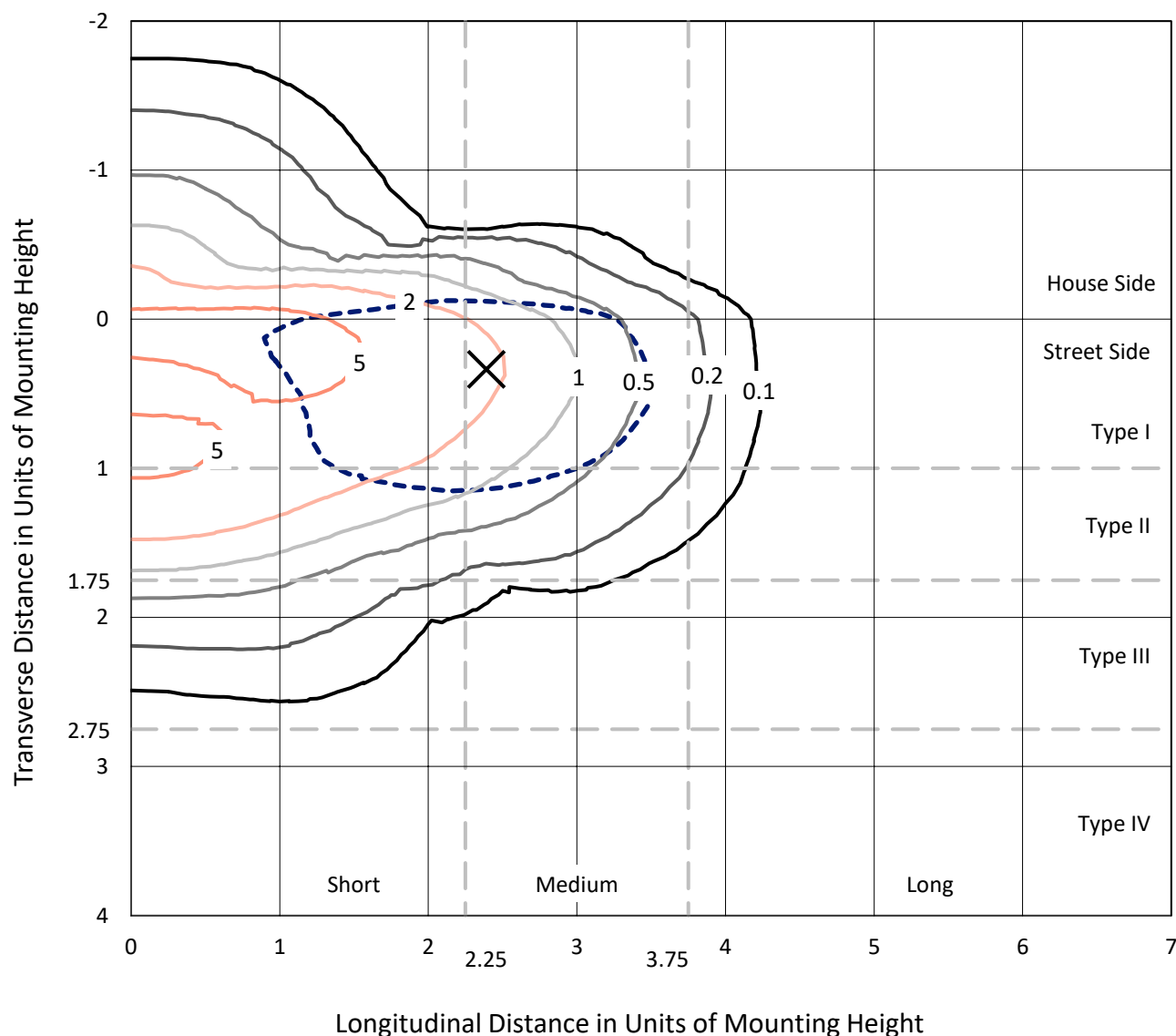
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

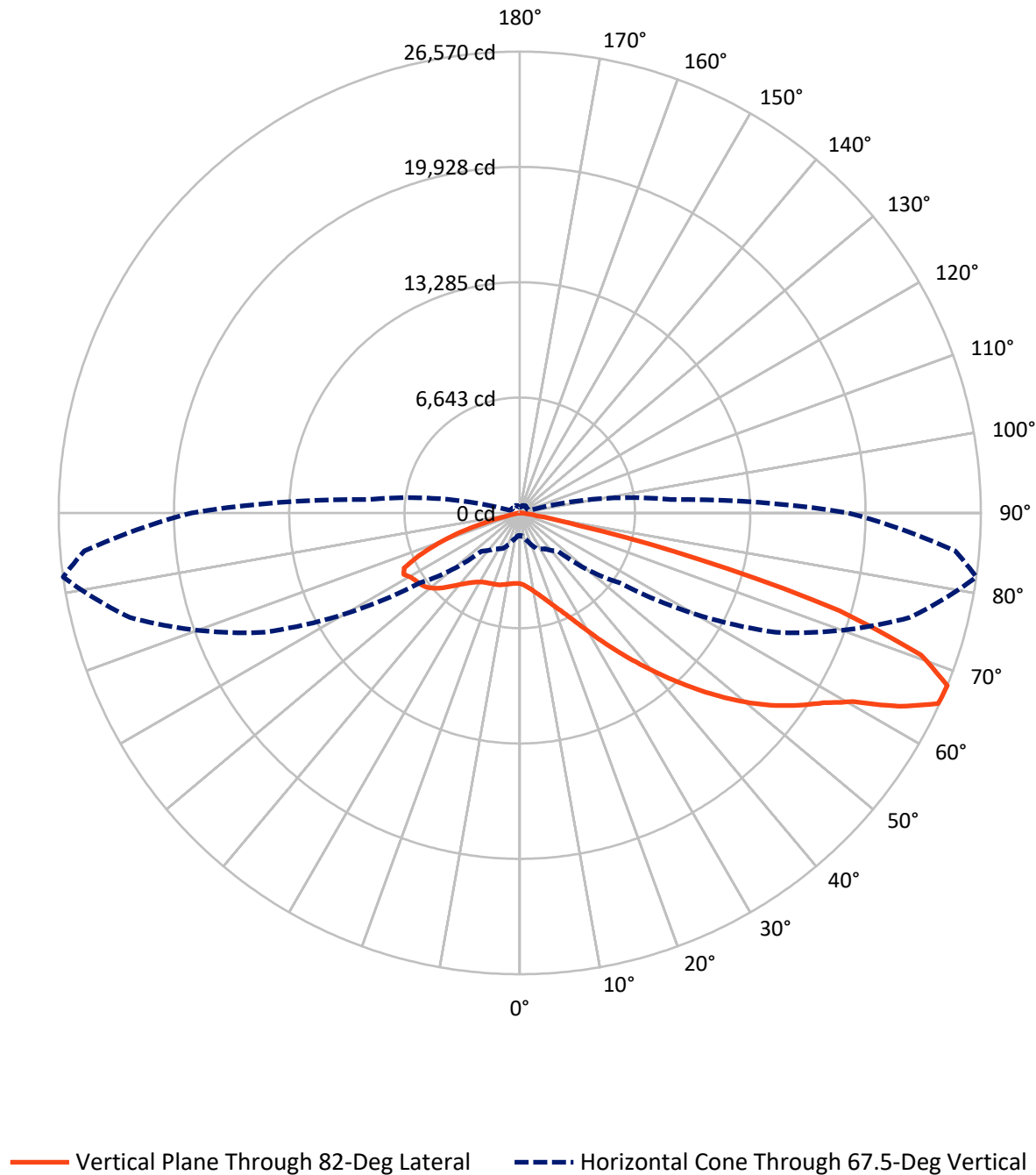
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 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	4460.2	0.0	4460.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	20162.4	0.0	20162.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	24622.5	0.0	24622.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	363.4	1.5
10°-20°	944.4	3.8
20°-30°	1512.6	6.1
30°-40°	2674.7	10.9
40°-50°	4686.4	19.0
50°-60°	6250.3	25.4
60°-70°	5818.7	23.6
70°-80°	2233.2	9.1
80°-90°	138.7	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°	24622.5	100.0
0°-180°	24622.5	100.0

Coefficient of Utilization



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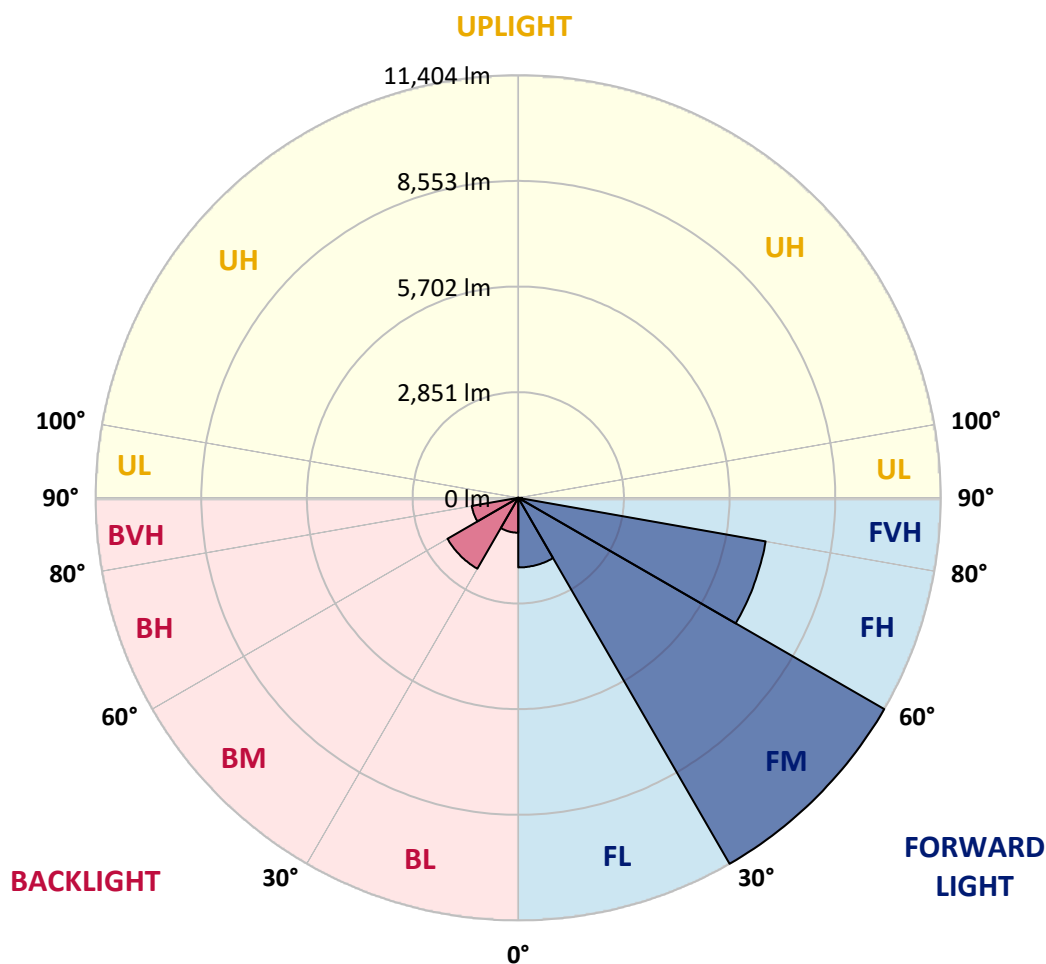
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1878.4	7.6			
FM	(30°-60°)	11404.2	46.3			
FH	(60°-80°)	6779.0	27.5			G3/7500
FVH	(80°-90°)	100.8	0.4			G2/225
BL	(0°-30°)	942.0	3.8	B2/1000		
BM	(30°-60°)	2207.3	9.0	B2/2500		
BH	(60°-80°)	1273.0	5.2	B3/2500		G3/2500
BVH	(80°-90°)	37.9	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°	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1
2.5°	4311.4	4336.2	4322.0	4314.9	4302.5	4284.8	4270.6	4226.3	4180.2	4150.0	4139.4
5°	4398.2	4423.1	4421.2	4428.3	4437.2	4442.6	4439.0	4389.4	4323.8	4272.4	4242.2
7.5°	4323.8	4352.2	4375.2	4410.7	4472.7	4538.3	4570.2	4559.5	4492.2	4421.2	4384.0
10°	4112.8	4142.9	4197.9	4281.2	4412.4	4554.2	4673.0	4727.9	4685.4	4607.4	4556.0
12.5°	3726.4	3756.5	3864.7	4045.5	4265.2	4511.6	4738.6	4885.8	4896.3	4818.3	4758.0
15°	3292.0	3322.1	3437.3	3664.3	3999.3	4394.7	4774.0	5052.3	5146.3	5079.0	5006.3
17.5°	3022.5	3049.2	3136.0	3318.6	3667.9	4160.7	4761.6	5229.7	5444.2	5391.0	5304.1
20°	2941.0	2964.1	3004.8	3132.5	3423.2	3917.8	4680.0	5396.3	5765.0	5734.9	5637.4
22.5°	3027.8	3049.2	3061.6	3118.3	3300.9	3758.3	4577.2	5566.5	6137.3	6140.9	6022.1
25°	3228.2	3249.5	3235.3	3270.8	3350.5	3708.7	4538.3	5766.8	6605.3	6644.4	6509.6
27.5°	3558.0	3559.7	3526.0	3524.3	3536.7	3783.1	4579.1	5981.3	7195.6	7268.3	7101.7
30°	4219.2	4192.6	4063.2	3923.1	3859.3	4006.4	4692.4	6234.8	7892.3	8021.8	7812.6
32.5°	5238.5	5199.5	4961.9	4627.0	4290.0	4366.3	4896.3	6523.7	8651.1	8885.1	8629.8
35°	6344.7	6334.1	6085.9	5587.8	4999.2	4878.6	5227.9	6903.2	9479.0	9851.3	9548.1
37.5°	7372.9	7367.6	7225.7	6639.0	5922.8	5593.0	5759.7	7399.5	10365.3	10904.3	10546.1
40°	8312.4	8328.4	8186.6	7661.9	6940.4	6509.6	6483.0	8012.8	11351.0	12051.2	11625.8
42.5°	9124.4	9142.2	8998.6	8610.3	7945.5	7523.6	7371.2	8764.6	12313.6	13283.3	12779.8
45°	9675.7	9785.7	9764.4	9454.1	8977.3	8539.4	8438.3	9707.7	13410.9	14589.8	13999.4
47.5°	9831.7	9932.8	10092.4	10134.9	9844.1	9413.4	9533.9	10844.0	14520.7	15898.2	15226.3
50°	9447.0	9541.0	9872.5	10314.0	10516.0	10383.0	10599.3	12061.9	15657.0	17202.9	16429.9
52.5°	8688.3	8784.0	9202.4	9900.9	10725.2	11143.6	11668.3	13262.1	16757.9	18438.5	17569.8
55°	7590.9	7692.0	8229.1	9019.8	10326.4	11457.3	12560.0	14460.4	17766.6	19550.0	18598.0
57.5°	6098.3	6172.8	6731.2	7837.4	9323.0	11145.3	13217.7	15768.7	18716.8	20642.1	19617.4
60°	3974.5	4040.1	4689.0	5922.8	7660.1	10103.0	13348.9	17227.7	19979.0	22062.0	20991.3
62.5°	2643.2	2687.5	3072.2	3978.0	5394.5	8101.5	12581.3	18392.4	21829.7	24533.3	23347.2
65°	1813.5	1857.8	2242.5	2873.7	3485.2	5359.0	10374.2	18238.1	23506.8	26495.7	25093.4
67.5°	1294.2	1331.4	1657.5	2253.2	2522.6	3112.9	7032.5	16266.9	23265.8	26570.2	25187.4
70°	927.1	948.4	1217.9	1755.0	2005.0	1870.2	3910.7	12441.2	20370.7	24535.0	23269.2
72.5°	648.8	655.9	845.6	1336.7	1615.0	1365.0	1861.4	8294.7	15407.1	19257.5	18039.6
75°	439.6	448.5	569.1	980.3	1295.9	1042.4	985.6	4447.9	9044.6	10659.6	9555.2
77.5°	269.5	273.0	367.0	670.1	969.6	794.2	634.7	1884.5	3499.5	3435.6	2928.6
80°	152.4	152.4	234.0	416.6	661.2	512.3	445.0	801.2	1108.0	973.2	858.0
82.5°	85.1	86.8	170.1	258.8	437.9	303.1	244.7	370.5	478.7	423.7	368.7
85°	35.5	38.9	104.6	122.3	209.2	150.7	99.3	156.0	177.3	157.7	115.2
87.5°	3.6	5.3	31.9	23.1	24.8	30.1	14.1	30.1	24.8	24.8	17.7
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°	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1	4079.1
2.5°	4105.7	4079.1	4011.7	3933.7	3830.9	3781.3	3714.0	3667.9	3628.8	3632.4	3596.9
5°	4185.5	4118.1	3967.5	3779.5	3545.5	3378.9	3201.6	3079.3	2980.0	2958.8	2910.9
7.5°	4295.4	4189.1	3924.9	3586.3	3190.9	2891.4	2623.7	2451.7	2329.4	2290.4	2251.4
10°	4437.2	4283.0	3869.9	3343.4	2774.4	2393.3	2106.1	1971.3	1887.9	1859.7	1838.3
12.5°	4602.0	4391.1	3797.2	3047.4	2345.4	1978.4	1795.8	1728.5	1701.8	1693.0	1687.7
15°	4809.5	4525.9	3687.3	2696.4	1981.9	1724.9	1646.9	1638.1	1641.5	1638.1	1636.2
17.5°	5055.9	4673.0	3508.3	2334.7	1737.3	1595.5	1567.1	1574.2	1583.1	1581.3	1577.8
20°	5325.4	4818.3	3279.6	2013.8	1570.7	1503.3	1487.4	1494.4	1501.5	1497.9	1496.2
22.5°	5632.1	4974.3	3026.1	1763.9	1459.0	1418.2	1400.5	1402.3	1402.3	1395.1	1391.6
25°	5999.0	5146.3	2760.2	1586.6	1373.9	1341.9	1320.7	1313.6	1303.0	1281.7	1278.2
27.5°	6436.9	5328.9	2504.9	1462.6	1306.6	1276.4	1251.5	1233.8	1207.2	1171.8	1168.3
30°	6929.7	5550.5	2288.6	1384.6	1253.4	1223.2	1194.8	1168.3	1129.2	1085.0	1081.4
32.5°	7509.5	5788.1	2130.9	1333.1	1205.5	1173.5	1139.9	1108.0	1065.4	1021.1	1022.8
35°	8200.8	6075.3	2038.7	1297.6	1168.3	1125.7	1088.4	1053.0	1021.1	982.2	978.6
37.5°	8950.7	6380.2	2010.3	1279.9	1143.4	1077.8	1035.2	1010.4	1007.0	983.9	982.2
40°	9771.4	6741.8	2031.5	1269.3	1116.8	1031.8	985.6	980.3	989.2	948.4	950.2
42.5°	10640.1	7170.8	2067.0	1256.9	1079.6	985.6	941.4	941.4	934.3	877.5	877.5
45°	11579.6	7665.5	2102.5	1226.7	1035.2	939.5	905.9	893.5	863.4	808.4	806.6
47.5°	12526.3	8168.8	2129.1	1171.8	982.2	900.6	870.4	842.0	797.8	748.1	746.3
50°	13425.1	8621.0	2100.7	1090.3	921.9	863.4	831.4	792.4	744.6	710.8	705.6
52.5°	14228.2	9012.7	1980.2	994.6	858.0	824.3	796.0	755.2	716.2	680.7	677.2
55°	14926.7	9330.1	1767.4	904.2	801.2	790.7	762.3	710.8	657.7	627.6	624.0
57.5°	15596.7	9571.1	1501.5	829.6	749.9	753.4	710.8	664.8	615.1	583.2	579.7
60°	16488.5	9893.8	1232.0	760.6	694.9	705.6	659.5	625.8	563.8	523.0	517.6
62.5°	17913.7	10395.4	978.6	675.4	631.1	634.7	615.1	574.4	499.9	452.0	448.5
65°	19044.8	10211.2	771.1	583.2	558.4	563.8	563.8	519.5	439.6	384.7	379.4
67.5°	18917.1	8743.2	615.1	492.8	489.2	492.8	505.2	468.0	390.0	345.7	338.6
70°	17426.2	6954.5	492.8	409.5	425.5	416.6	452.0	427.2	351.0	306.7	301.3
72.5°	14219.3	5009.8	375.9	338.6	326.2	340.4	407.7	384.7	292.5	242.8	237.6
75°	8309.0	2673.3	280.1	267.7	235.7	283.6	361.6	328.0	223.3	179.1	173.7
77.5°	2705.3	932.4	205.6	196.8	175.5	228.7	308.4	276.5	182.6	141.9	136.5
80°	725.1	281.9	140.0	129.5	113.5	170.1	244.7	219.9	131.2	92.1	90.4
82.5°	290.7	118.8	81.6	72.7	62.0	117.0	193.2	177.3	97.5	58.5	58.5
85°	94.0	38.9	30.1	23.1	28.4	72.7	115.2	120.5	69.2	30.1	23.1
87.5°	12.4	5.3	5.3	7.1	5.3	12.4	35.5	33.7	19.5	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)