

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: P964185

Luminaire Tested: **NAV-SB3B-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15466.2 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

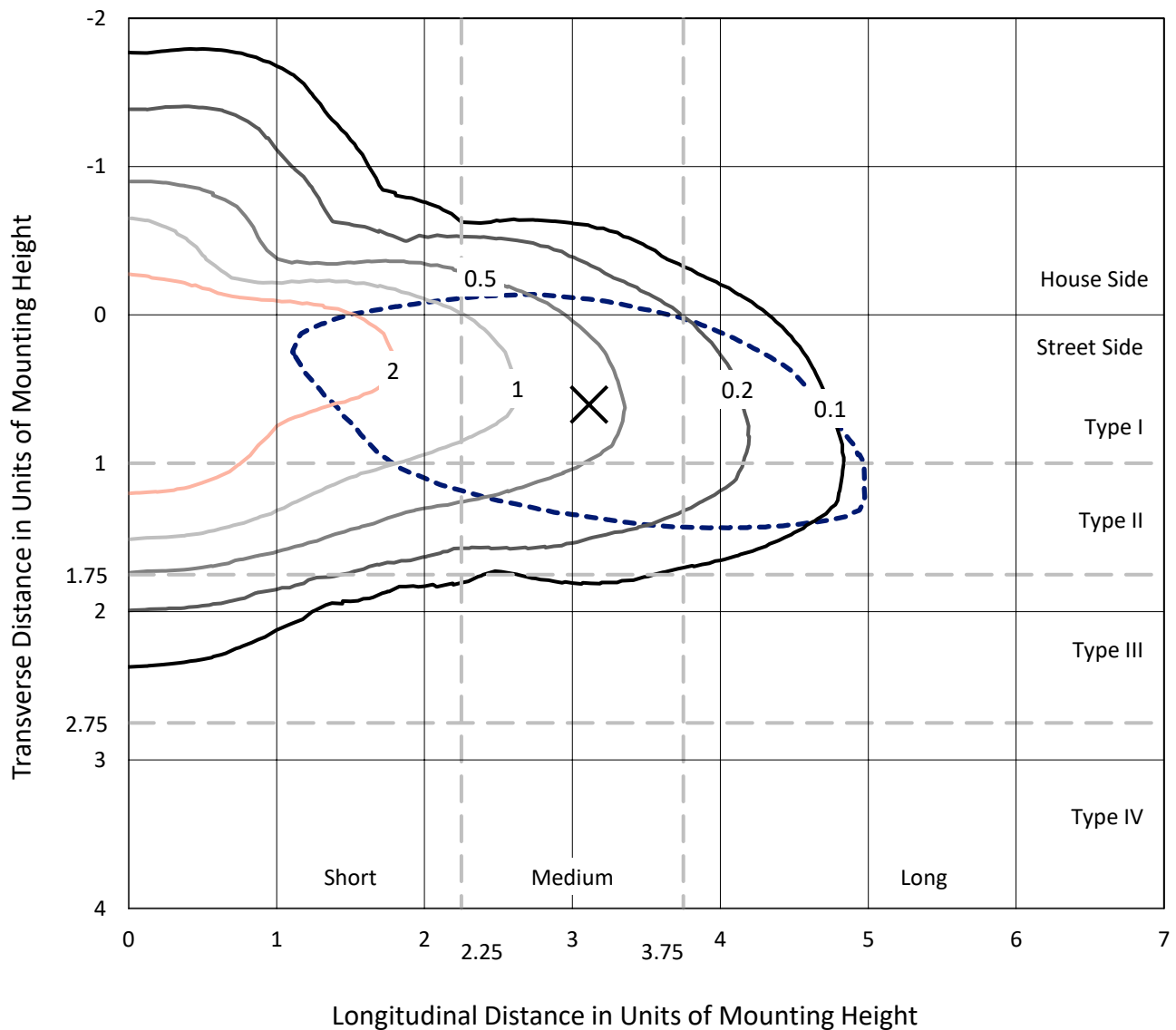
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

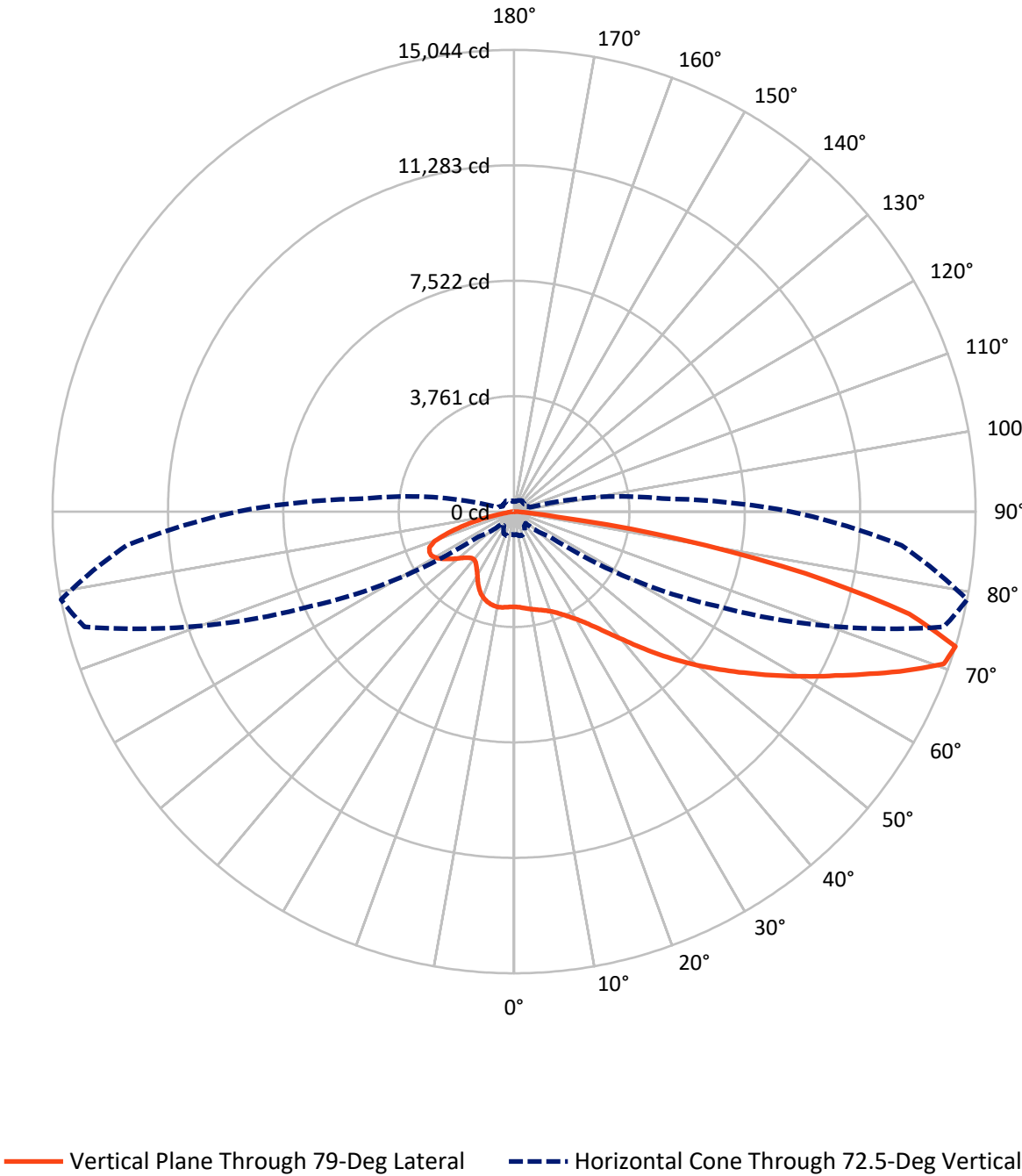
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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	3403.4	0.0	3403.4
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	12062.8	0.0	12062.8
	% Fixture	78.0	0.0	78.0
Total	Lumens	15466.2	0.0	15466.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.8	1.8
10°-20°	736.8	4.8
20°-30°	1188.9	7.7
30°-40°	1784.4	11.5
40°-50°	2531.3	16.4
50°-60°	3196.6	20.7
60°-70°	3246.6	21.0
70°-80°	2212.7	14.3
80°-90°	287.1	1.9
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°	15466.2	100.0
0°-180°	15466.2	100.0

Coefficient of Utilization



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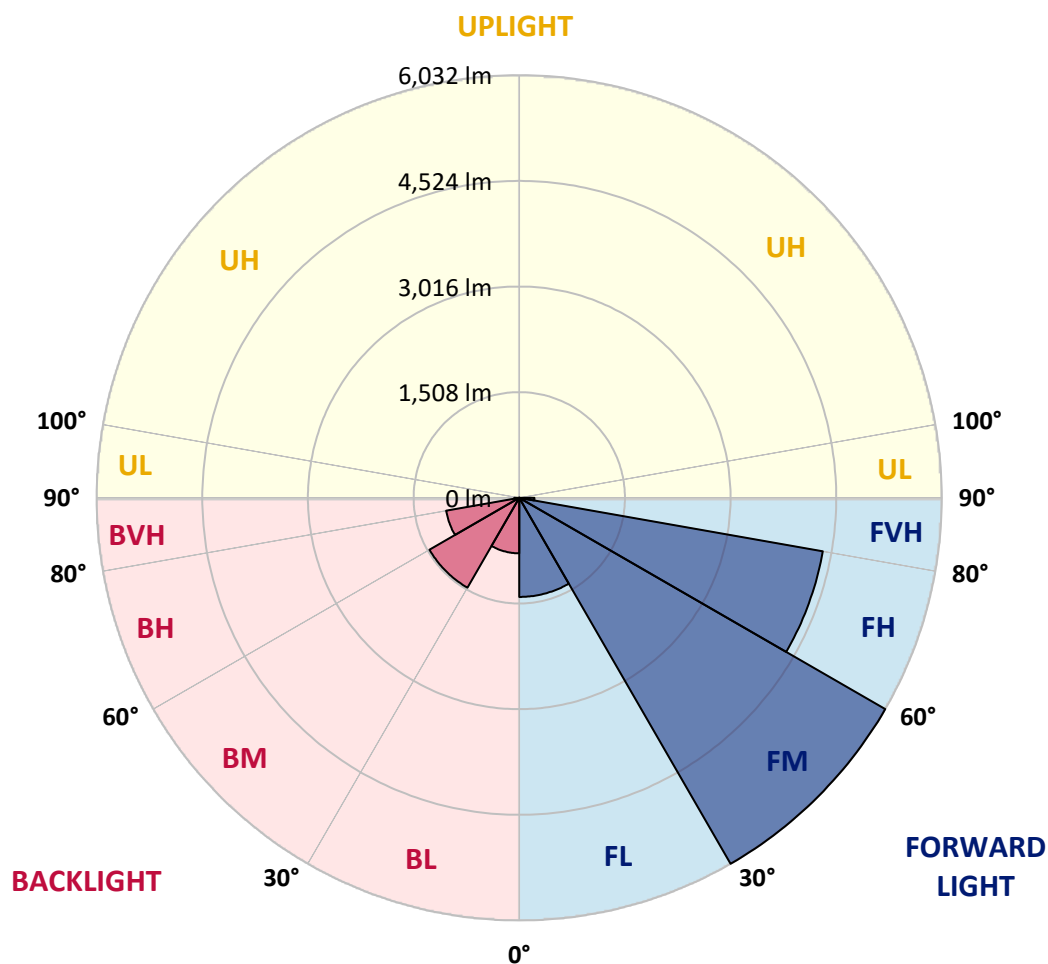
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1414.8	9.1			
FM	(30°-60°)	6032.1	39.0			
FH	(60°-80°)	4399.6	28.4			G2/5000
FVH	(80°-90°)	216.3	1.4			G2/225
BL	(0°-30°)	792.8	5.1	B2/1000		
BM	(30°-60°)	1480.1	9.6	B2/2500		
BH	(60°-80°)	1059.7	6.9	B3/2500		G3/2500
BVH	(80°-90°)	70.8	0.5			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°	79°	85°
0°	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7
2.5°	3106.4	3091.6	3100.6	3097.3	3101.4	3106.4	3108.0	3110.5	3118.6	3117.7	3116.9
5°	3099.8	3085.0	3097.3	3093.2	3103.9	3115.3	3125.1	3134.1	3147.3	3153.0	3144.8
7.5°	3085.9	3076.0	3088.3	3100.6	3120.2	3137.4	3151.4	3171.8	3190.6	3193.9	3199.6
10°	3004.9	2997.5	3026.2	3058.1	3112.1	3158.7	3189.0	3212.7	3233.2	3236.4	3244.6
12.5°	2920.6	2911.6	2943.5	2986.8	3074.4	3158.7	3222.5	3253.6	3271.6	3282.3	3294.5
15°	2906.7	2899.3	2917.4	2955.0	3027.7	3136.6	3245.5	3302.7	3318.2	3330.5	3335.5
17.5°	2973.8	2959.9	2967.3	2980.4	3022.9	3116.1	3263.4	3358.3	3382.0	3395.1	3395.1
20°	3129.2	3109.6	3098.2	3071.9	3064.6	3119.4	3261.8	3425.3	3456.5	3472.8	3476.9
22.5°	3336.2	3323.2	3298.6	3232.3	3160.3	3159.5	3292.8	3511.3	3569.4	3584.9	3575.1
25°	3586.6	3566.9	3535.8	3445.8	3307.6	3238.9	3345.2	3620.9	3718.3	3722.4	3693.7
27.5°	3874.5	3845.1	3802.5	3684.0	3497.4	3363.2	3425.3	3746.9	3889.3	3887.6	3828.7
30°	4178.0	4148.6	4103.6	3959.6	3724.8	3530.9	3536.7	3882.7	4092.1	4083.2	3982.5
32.5°	4399.7	4377.7	4368.7	4257.4	3986.6	3729.0	3664.3	4033.3	4342.5	4334.3	4193.6
35°	4570.0	4541.3	4551.9	4495.4	4272.1	3950.7	3820.6	4212.4	4646.8	4646.0	4470.9
37.5°	4738.5	4713.1	4722.1	4684.5	4536.3	4232.0	4011.1	4431.7	5023.9	5042.0	4806.3
40°	4892.2	4865.3	4901.2	4866.1	4741.8	4531.4	4227.9	4679.5	5460.8	5495.2	5212.1
42.5°	4984.7	4963.5	5023.1	5023.9	4920.1	4784.3	4466.0	4952.8	5966.4	6043.3	5711.2
45°	5016.6	5009.3	5099.3	5118.0	5078.0	4930.7	4680.4	5250.6	6511.3	6648.8	6279.8
47.5°	4982.2	4968.4	5092.7	5162.2	5194.1	4999.4	4857.9	5572.9	7067.6	7268.8	6899.9
50°	4808.8	4781.8	4966.7	5113.1	5226.9	5044.4	5037.1	5945.1	7700.0	7920.1	7523.3
52.5°	4497.1	4476.7	4686.9	4941.3	5154.8	5066.5	5238.3	6351.7	8300.4	8585.2	8162.2
55°	4098.7	4071.7	4303.3	4635.4	4975.7	5059.1	5439.6	6806.6	9008.9	9297.8	8822.4
57.5°	3467.2	3413.1	3706.0	4098.7	4683.6	5050.2	5649.0	7259.0	9728.9	10074.9	9526.8
60°	2545.9	2465.7	2824.9	3290.5	4112.6	4962.6	5908.3	7766.2	10592.8	10904.5	10295.8
62.5°	1482.4	1435.8	1670.5	2104.9	3099.8	4447.2	6054.0	8356.1	11442.0	11769.3	11051.8
65°	1151.1	1138.0	1158.5	1192.0	1725.4	3329.7	5604.8	8931.2	12521.9	12750.9	11839.6
67.5°	1052.9	1043.0	1052.1	989.1	875.4	1854.6	4434.2	9076.9	13678.6	13817.7	12529.2
70°	935.9	924.4	953.9	900.0	688.8	843.5	2865.0	8548.4	14599.1	14860.0	13053.7
72.5°	762.5	749.4	818.1	793.6	580.0	541.6	1439.0	7292.6	14502.5	15044.1	12678.1
75°	585.8	578.4	660.2	680.7	472.8	426.2	690.4	5420.7	12762.4	13308.1	10926.6
77.5°	454.9	449.2	490.9	565.3	381.2	330.6	424.6	3438.5	9617.6	9713.3	7529.9
80°	341.1	324.8	363.3	437.7	296.9	241.4	287.9	2005.2	6079.3	5510.7	3277.3
82.5°	213.5	205.3	237.3	292.0	209.4	166.0	187.4	1107.7	2436.3	1435.0	632.4
85°	121.9	118.6	129.3	166.9	113.7	95.7	107.2	489.2	445.1	306.0	190.6
87.5°	49.1	47.5	58.9	74.4	41.7	35.2	37.6	117.8	98.2	90.8	63.0
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°	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7	3104.7
2.5°	3113.7	3113.7	3102.3	3084.2	3063.8	3050.7	3029.4	3023.7	3001.6	2995.0	3005.7
5°	3151.4	3144.8	3109.6	3058.9	2989.3	2925.6	2855.1	2811.0	2748.8	2726.7	2743.1
7.5°	3198.8	3180.8	3120.2	3009.0	2863.3	2720.1	2571.3	2458.4	2350.4	2312.0	2316.9
10°	3242.2	3216.8	3113.7	2919.0	2667.0	2419.1	2181.9	2015.8	1889.8	1838.2	1849.7
12.5°	3285.5	3238.9	3070.4	2769.2	2388.0	2051.8	1799.0	1669.7	1592.0	1529.8	1550.3
15°	3326.4	3260.9	3003.2	2568.9	2082.1	1741.0	1554.4	1451.3	1389.2	1348.2	1355.6
17.5°	3373.9	3279.8	2902.6	2314.4	1790.8	1525.7	1373.6	1311.4	1299.2	1294.3	1297.5
20°	3440.1	3296.9	2770.1	2029.7	1576.4	1353.9	1275.4	1269.7	1268.8	1266.4	1274.6
22.5°	3511.3	3317.4	2595.0	1771.2	1394.0	1246.8	1232.9	1221.4	1214.1	1213.3	1222.2
25°	3595.6	3324.0	2375.7	1559.3	1238.6	1196.1	1179.7	1162.6	1157.6	1157.6	1162.6
27.5°	3677.4	3301.8	2120.5	1375.2	1151.1	1149.4	1128.1	1122.5	1121.7	1124.1	1130.6
30°	3759.2	3260.1	1866.9	1205.1	1100.3	1100.3	1093.0	1097.1	1100.3	1108.5	1114.3
32.5°	3869.6	3215.9	1655.1	1079.1	1056.2	1048.0	1055.3	1063.5	1066.8	1077.5	1086.4
35°	4031.6	3184.9	1486.5	1010.3	1010.3	999.7	1003.8	1002.1	994.8	989.9	1001.3
37.5°	4246.0	3183.2	1347.5	978.5	971.9	970.3	971.1	960.4	931.8	897.5	898.3
40°	4503.6	3227.4	1240.2	956.3	951.4	961.2	956.3	927.7	849.2	789.5	787.8
42.5°	4849.7	3353.4	1171.5	929.4	944.1	956.3	936.7	837.7	784.5	744.5	742.8
45°	5257.1	3557.9	1136.3	900.8	930.2	944.9	850.0	806.7	764.1	715.9	712.6
47.5°	5718.6	3815.7	1128.1	873.7	899.1	908.0	813.2	793.6	745.3	692.9	688.8
50°	6220.8	4120.8	1150.3	841.8	854.1	823.0	800.9	782.9	733.0	681.5	675.8
52.5°	6740.3	4457.0	1194.4	798.5	809.1	774.7	796.0	780.4	725.7	656.1	651.2
55°	7250.8	4795.7	1237.0	747.7	763.3	731.3	782.1	770.7	692.1	613.6	609.5
57.5°	7769.5	5132.8	1278.7	702.7	719.1	689.6	760.0	744.5	654.5	574.3	572.7
60°	8308.6	5460.0	1298.4	659.4	670.9	651.2	726.5	699.5	611.9	534.2	531.8
62.5°	8813.5	5732.4	1266.4	616.0	623.4	615.2	682.3	646.3	569.4	489.2	488.4
65°	9319.8	5894.5	1168.3	573.5	575.1	571.0	620.1	589.1	519.5	450.0	445.1
67.5°	9778.8	5985.3	1012.0	527.7	523.6	521.9	562.0	526.8	471.2	410.7	405.8
70°	9876.1	5754.6	773.2	473.7	473.7	469.6	498.3	462.3	418.1	369.0	367.4
72.5°	9020.4	4840.7	549.0	412.4	418.9	410.7	434.4	404.2	364.1	331.4	321.5
75°	7273.7	3549.8	399.2	349.3	360.8	346.9	369.0	347.7	313.3	312.5	281.5
77.5°	4997.8	2194.9	289.6	287.9	296.1	278.2	303.5	292.0	261.0	247.0	231.5
80°	2132.8	875.4	211.0	222.5	222.5	206.1	235.6	238.9	211.9	205.3	205.3
82.5°	424.6	248.7	148.1	153.0	144.0	139.1	166.9	184.9	255.2	283.9	284.7
85°	127.6	91.6	89.2	83.4	73.6	74.4	98.2	185.7	229.1	130.9	112.9
87.5°	35.2	22.9	23.7	18.9	15.6	20.5	33.5	140.7	76.9	32.7	27.8
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)