

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: P965227

Luminaire Tested: **NAV-SB3D-827-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965227
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27231.2 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

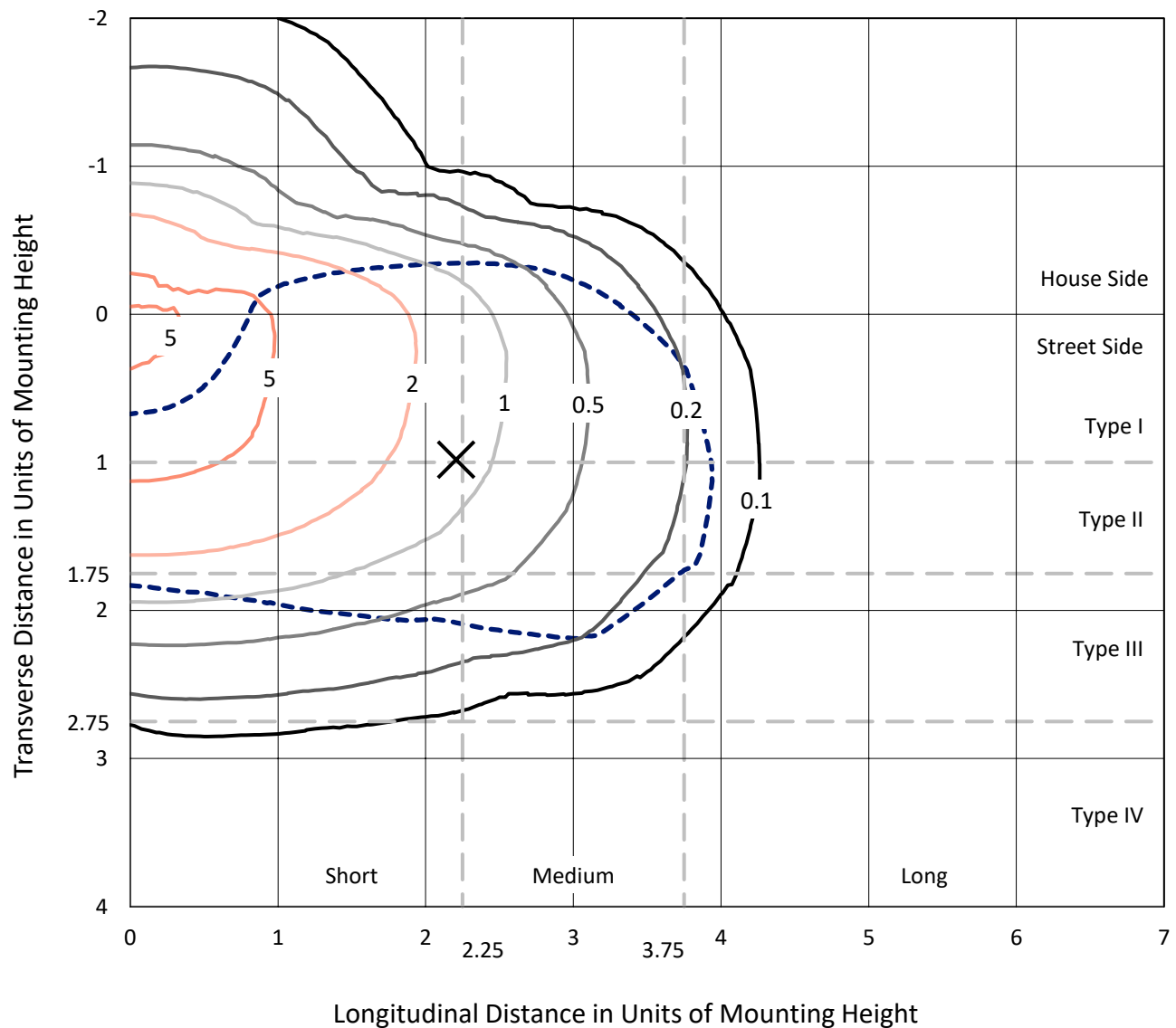
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

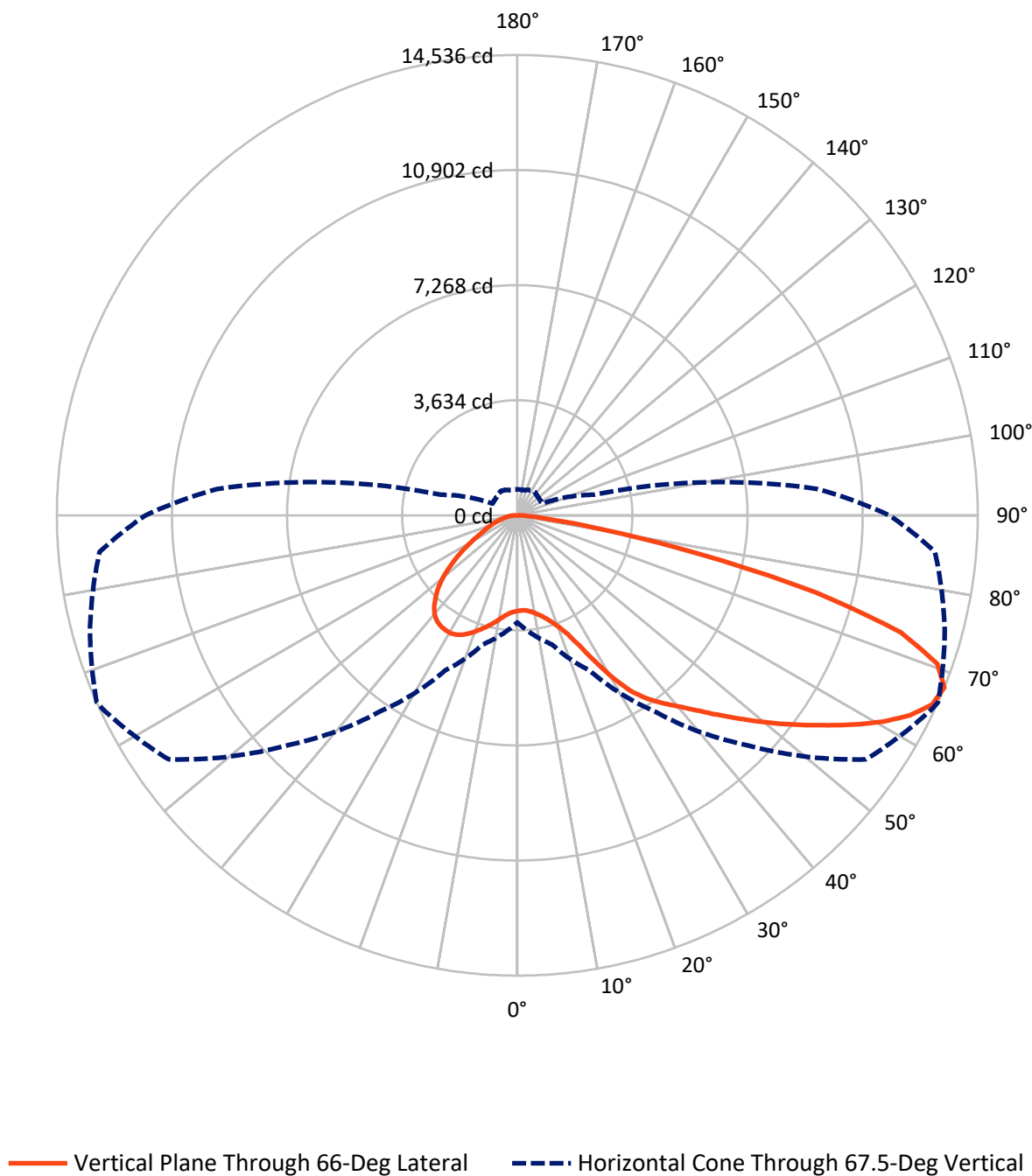
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6771.0	0.0	6771.0
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	20460.2	0.0	20460.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	27231.2	0.0	27231.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.4	1.1
10°-20°	989.3	3.6
20°-30°	1906.9	7.0
30°-40°	3343.5	12.3
40°-50°	4970.7	18.3
50°-60°	6300.9	23.1
60°-70°	6165.2	22.6
70°-80°	2940.9	10.8
80°-90°	314.3	1.2
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°	27231.2	100.0
0°-180°	27231.2	100.0

Coefficient of Utilization



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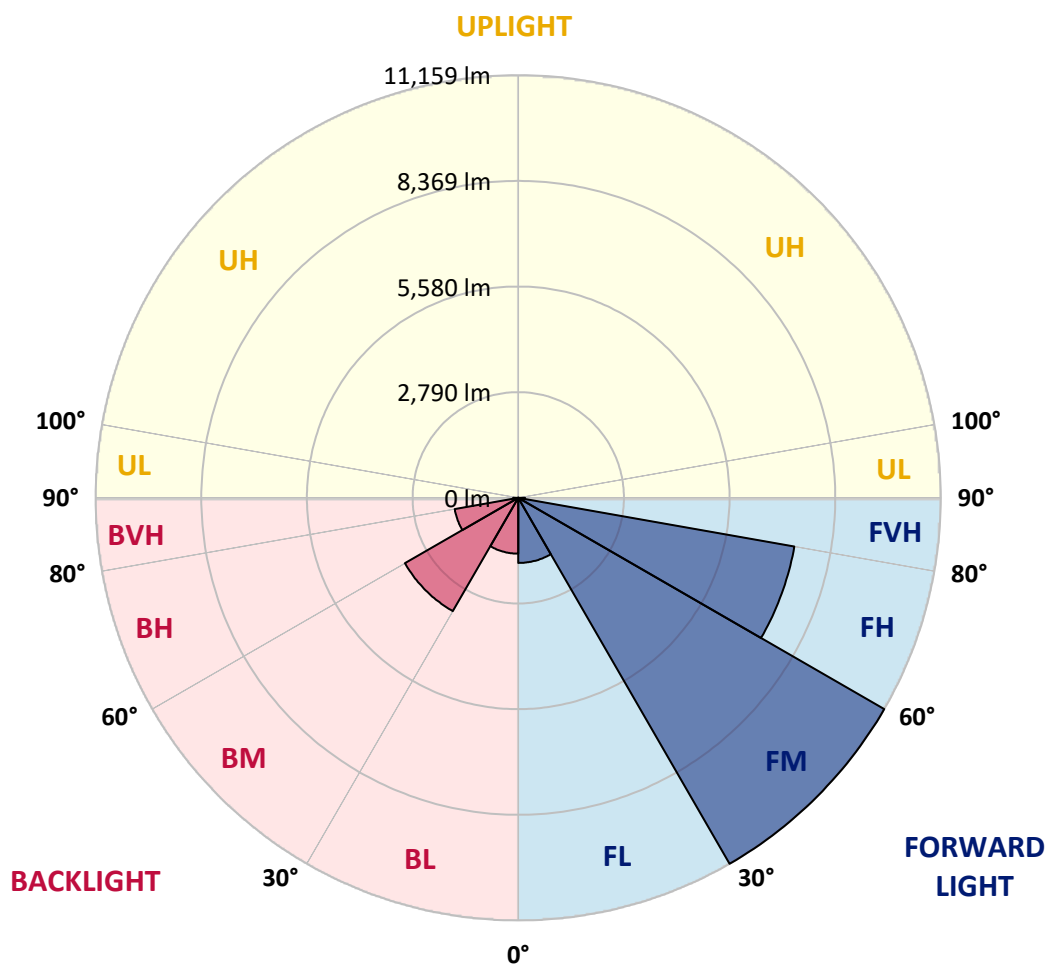
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1720.7	6.3			
FM	(30°-60°)	11159.1	41.0			
FH	(60°-80°)	7402.2	27.2			G3/7500
FVH	(80°-90°)	178.2	0.7			G2/225
BL	(0°-30°)	1475.0	5.4	B3/2500		
BM	(30°-60°)	3456.0	12.7	B3/5000		
BH	(60°-80°)	1703.9	6.3	B3/2500		G3/2500
BVH	(80°-90°)	136.1	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3
2.5°	2988.8	3006.0	3001.7	2994.5	2993.1	2996.0	3000.3	3004.6	3003.1	3010.3	3021.7
5°	2980.2	2997.4	2996.0	2996.0	3001.7	3013.2	3020.3	3027.4	3020.3	3028.9	3044.7
7.5°	2985.9	2998.8	3004.6	3010.3	3024.6	3046.1	3063.2	3079.0	3070.4	3080.4	3100.4
10°	3058.9	3069.0	3074.7	3074.7	3084.6	3109.0	3126.1	3154.7	3147.7	3163.4	3189.1
12.5°	3192.0	3202.0	3202.0	3196.3	3203.4	3219.2	3224.9	3256.3	3243.5	3269.2	3295.0
15°	3355.1	3375.1	3359.3	3349.4	3352.3	3367.9	3366.5	3390.9	3378.0	3399.4	3422.4
17.5°	3535.3	3561.2	3535.3	3533.9	3528.3	3545.4	3546.8	3568.2	3545.4	3561.2	3576.8
20°	3748.5	3784.3	3762.9	3770.1	3757.1	3764.3	3771.5	3803.0	3767.2	3778.6	3774.3
22.5°	4049.0	4091.9	4069.0	4096.2	4087.6	4081.9	4080.5	4136.3	4080.5	4084.7	4043.3
25°	4486.8	4538.3	4498.2	4535.4	4535.4	4554.1	4575.5	4647.0	4554.1	4526.9	4419.6
27.5°	5133.5	5185.0	5106.3	5129.2	5122.0	5167.8	5145.0	5322.3	5222.2	5177.9	4961.8
30°	5911.8	6003.4	5854.6	5848.9	5841.7	5914.7	5947.6	6064.9	5963.3	5919.0	5658.6
32.5°	6753.1	6848.9	6671.5	6620.1	6592.9	6637.2	6610.0	6704.4	6634.3	6565.6	6243.8
35°	7643.0	7737.4	7568.6	7468.5	7359.7	7266.7	7169.5	7193.8	7128.0	7023.5	6690.2
37.5°	8484.3	8657.5	8478.6	8371.3	8171.0	7989.3	7717.4	7604.4	7542.9	7447.0	7110.8
40°	9341.3	9440.0	9304.1	9212.6	8995.1	8710.3	8275.4	8036.5	7953.5	7860.5	7575.8
42.5°	9972.2	10066.7	9993.8	9930.8	9760.6	9430.0	8867.8	8568.7	8448.6	8344.1	8102.3
45°	10473.0	10543.2	10497.3	10520.3	10447.3	10126.8	9481.6	9139.6	9015.1	8887.8	8697.4
47.5°	10674.8	10749.2	10822.2	10958.1	11082.5	10846.4	10141.1	9757.7	9626.1	9495.8	9308.4
50°	10651.9	10727.8	10939.4	11228.5	11614.8	11536.1	10836.4	10415.8	10294.2	10145.3	9972.2
52.5°	10468.7	10554.6	10826.5	11307.2	11922.4	12052.6	11544.7	11095.4	10980.9	10803.5	10630.4
55°	9988.0	10039.6	10447.3	11128.3	11995.4	12413.2	12238.6	11819.4	11704.9	11457.3	11268.5
57.5°	9096.7	9171.1	9764.9	10646.2	11812.2	12657.8	12848.1	12580.5	12470.4	12114.1	11916.6
60°	7933.5	8052.2	8731.8	9836.3	11345.8	12656.4	13401.8	13328.8	13237.3	12760.8	12554.8
62.5°	6617.2	6754.5	7408.4	8691.8	10530.2	12297.2	13748.0	13955.5	13908.2	13357.4	13094.2
65°	5082.0	5176.5	5827.4	7211.0	9261.2	11526.0	13788.1	14383.2	14391.8	13811.0	13376.0
67.5°	3383.7	3655.6	4220.6	5411.1	7561.4	10265.6	13436.1	14453.3	14536.3	13967.0	13234.4
70°	1651.1	2008.8	2562.5	3516.8	5411.1	8332.6	12516.2	13878.2	14062.8	13512.0	12390.2
72.5°	685.3	801.2	1103.1	1735.5	3106.2	5622.8	10667.6	12318.7	12660.6	11972.4	10417.3
75°	462.2	500.7	631.0	889.9	1415.0	2772.7	7693.1	9185.3	9736.2	9042.2	7391.2
77.5°	356.3	380.6	459.3	622.4	841.3	1048.8	4117.6	5535.5	5820.3	5388.2	3845.8
80°	280.4	299.0	343.4	453.6	596.7	560.9	1403.5	2508.1	2672.6	2242.0	1236.1
82.5°	243.2	250.4	246.1	307.6	396.3	327.6	460.7	925.7	1021.5	741.1	403.4
85°	176.0	196.0	204.6	190.2	210.3	165.9	188.9	327.6	360.6	322.0	227.4
87.5°	71.5	105.9	130.2	123.0	77.3	47.3	58.6	95.8	110.2	120.2	74.4
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°	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3	3020.3
2.5°	3023.1	3033.2	3040.4	3048.9	3054.6	3063.2	3080.4	3090.4	3091.8	3099.0	3097.5
5°	3050.3	3064.6	3080.4	3103.3	3129.0	3150.5	3183.4	3206.3	3214.9	3222.0	3220.5
7.5°	3109.0	3129.0	3157.6	3197.7	3234.9	3263.5	3303.6	3330.7	3358.0	3367.9	3369.4
10°	3196.3	3224.9	3266.4	3320.8	3360.8	3398.0	3439.5	3462.3	3489.6	3501.0	3506.7
12.5°	3305.0	3335.0	3389.5	3465.2	3502.4	3528.3	3542.5	3536.8	3542.5	3552.5	3555.4
15°	3429.4	3462.3	3524.0	3605.4	3631.3	3608.3	3576.8	3548.2	3543.9	3546.8	3556.9
17.5°	3576.8	3601.1	3672.7	3741.4	3722.8	3628.4	3559.7	3513.9	3491.0	3483.9	3493.9
20°	3782.9	3782.9	3841.5	3884.4	3760.0	3599.7	3492.5	3418.1	3370.8	3350.8	3346.5
22.5°	4033.3	4010.4	4047.5	4017.5	3752.8	3519.6	3370.8	3242.1	3170.5	3141.9	3137.6
25°	4350.9	4323.7	4313.7	4127.7	3701.4	3392.3	3150.5	2994.5	2931.6	2915.8	2918.7
27.5°	4830.2	4761.5	4631.4	4187.7	3606.9	3192.0	2893.0	2748.4	2712.7	2714.1	2718.4
30°	5468.3	5330.9	5011.8	4197.8	3452.4	2908.7	2629.7	2526.7	2509.5	2516.7	2541.0
32.5°	6059.2	5929.0	5401.0	4152.0	3214.9	2631.2	2393.7	2325.0	2299.2	2307.8	2319.3
35°	6522.8	6487.0	5761.6	4087.6	2923.0	2370.7	2181.9	2123.2	2073.2	2061.7	2070.3
37.5°	6960.6	6946.2	6032.0	3997.5	2634.0	2186.2	2011.7	1934.4	1861.4	1821.3	1822.8
40°	7441.3	7426.9	6209.4	3858.7	2377.9	2025.9	1858.5	1757.0	1666.9	1593.9	1601.0
42.5°	7982.1	7897.7	6293.8	3659.9	2160.4	1890.0	1734.1	1596.7	1477.9	1410.7	1415.0
45°	8573.0	8382.8	6292.4	3406.6	1977.3	1765.6	1601.0	1406.4	1296.2	1233.3	1230.4
47.5°	9199.7	8846.3	6215.2	3126.1	1799.9	1628.2	1395.0	1246.2	1173.2	1134.6	1126.0
50°	9846.4	9279.8	6083.5	2804.3	1618.2	1472.2	1266.2	1164.6	1108.8	1073.1	1060.2
52.5°	10454.4	9673.2	5924.7	2439.4	1433.6	1320.6	1209.0	1130.3	1071.6	1031.6	1014.4
55°	11019.6	10012.3	5700.1	2066.0	1283.4	1219.0	1181.8	1116.0	1048.8	1001.5	982.9
57.5°	11521.7	10232.7	5312.4	1715.4	1176.1	1148.9	1153.2	1091.6	1014.4	974.4	948.5
60°	11939.5	10394.3	4738.6	1390.7	1088.8	1080.2	1108.8	1045.9	955.7	910.0	889.9
62.5°	12189.9	10391.4	4034.7	1138.9	1014.4	1017.2	1050.2	988.6	897.1	854.1	841.3
65°	12168.5	10136.8	3262.1	974.4	942.9	945.8	988.6	925.7	848.4	822.7	821.2
67.5°	11737.8	9515.9	2502.3	867.0	864.2	877.1	927.1	882.7	818.4	815.5	819.8
70°	10571.7	8226.8	1802.8	781.2	782.6	801.2	867.0	855.6	802.7	808.4	807.0
72.5°	8477.2	6272.4	1210.4	691.1	692.5	722.5	809.7	834.1	786.9	862.7	874.2
75°	5645.7	3911.6	778.3	595.2	596.7	635.3	759.7	792.6	743.9	859.9	867.0
77.5°	2712.7	1758.4	563.8	500.7	500.7	536.5	656.7	709.6	633.9	668.2	612.3
80°	937.2	661.0	443.5	403.4	394.9	419.2	553.7	615.2	546.5	503.6	472.1
82.5°	369.1	343.4	356.3	313.3	284.7	300.4	430.6	507.9	402.0	363.4	361.9
85°	211.8	223.2	251.8	207.5	164.5	184.6	316.2	364.8	303.3	267.5	273.3
87.5°	57.2	78.7	115.9	107.3	74.4	78.7	150.3	201.7	174.6	134.5	138.8
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)