

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: P969446

Luminaire Tested: **NAV-SB5D-827-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-827-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

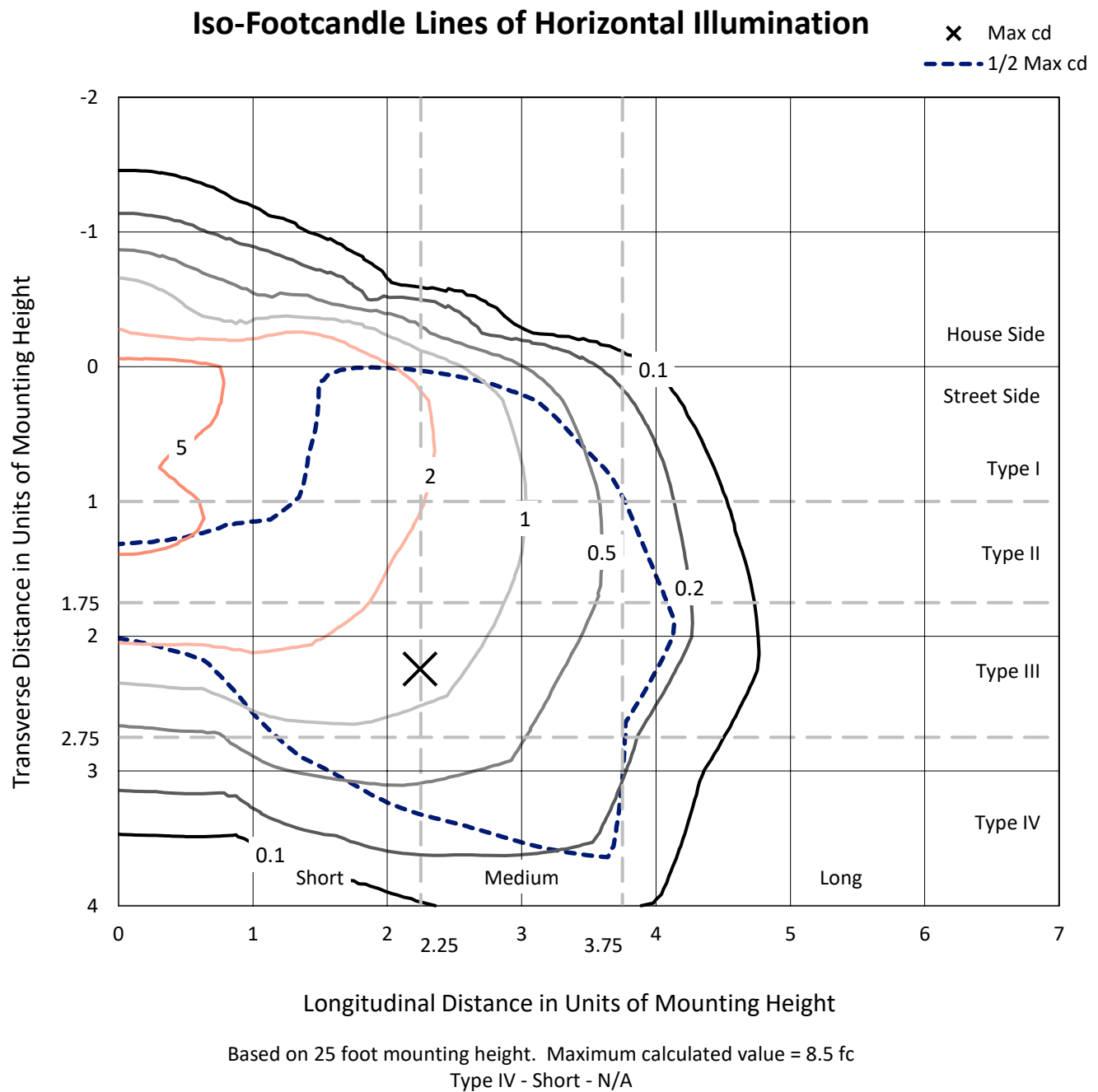
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35291.8 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

Input Watts (W): 364.9
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

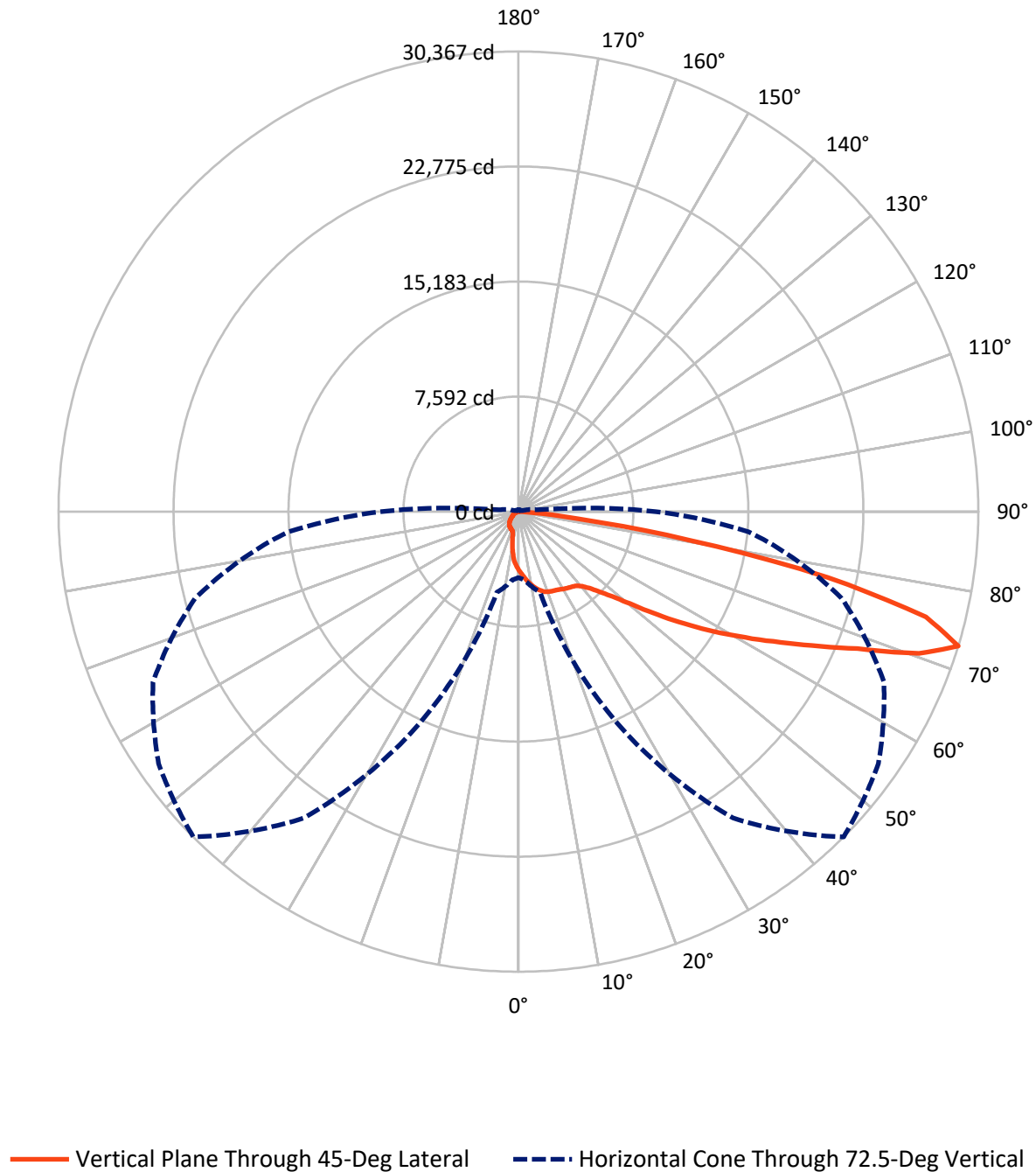


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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3708.2	0.0	3708.2
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	31583.6	0.0	31583.6
	% Fixture	89.5	0.0	89.5
Total	Lumens	35291.8	0.0	35291.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.3	1.0
10°-20°	1064.6	3.0
20°-30°	1748.3	5.0
30°-40°	2479.5	7.0
40°-50°	4098.4	11.6
50°-60°	7362.3	20.9
60°-70°	10222.9	29.0
70°-80°	7415.4	21.0
80°-90°	536.1	1.5
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°	35291.8	100.0
0°-180°	35291.8	100.0

Coefficient of Utilization



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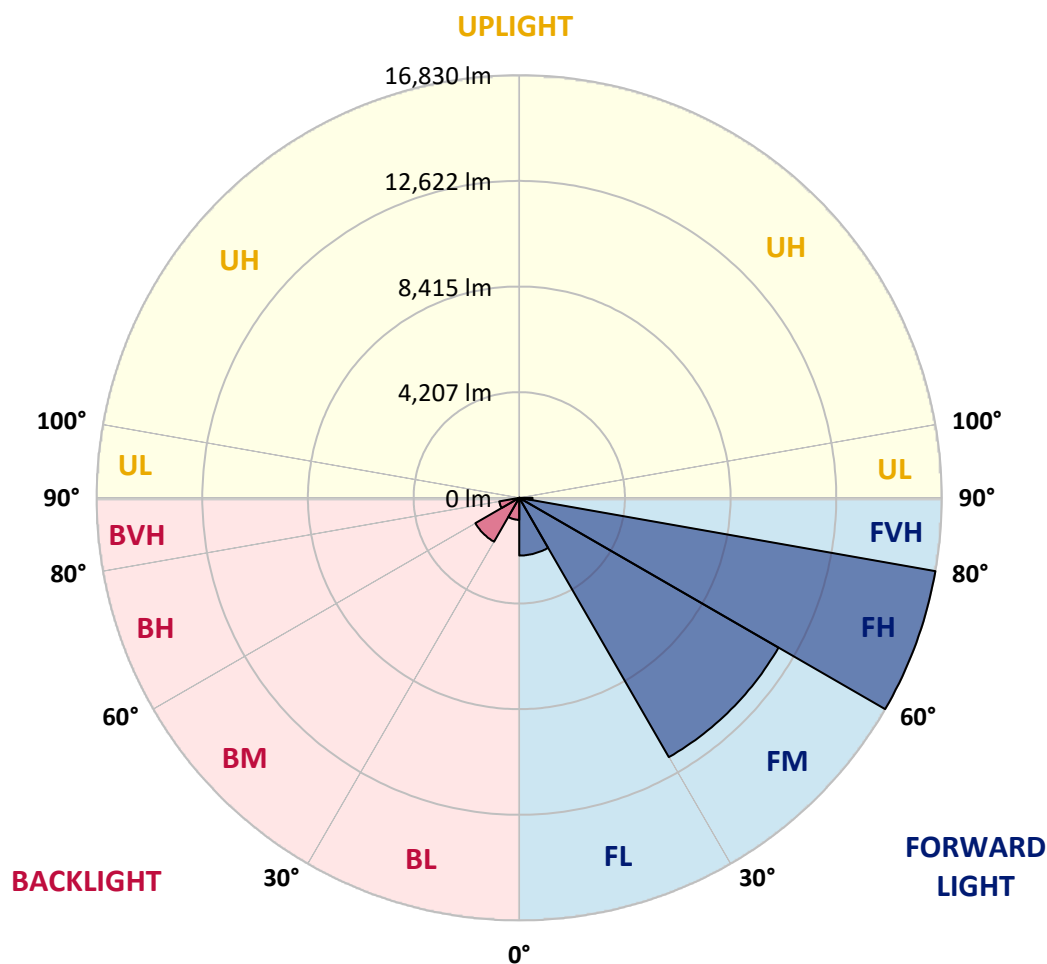
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2298.9	6.5			
FM	(30°-60°)	11923.4	33.8			
FH	(60°-80°)	16829.6	47.7			G5
FVH	(80°-90°)	531.6	1.5			G4/750
BL	(0°-30°)	878.3	2.5	B2/1000		
BM	(30°-60°)	2016.7	5.7	B2/2500		
BH	(60°-80°)	808.7	2.3	B2/1000		G2/1000
BVH	(80°-90°)	4.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3
2.5°	4222.8	4230.1	4225.3	4196.3	4148.2	4121.6	4107.2	4059.0	4027.6	3972.3	3914.5
5°	4610.7	4639.6	4622.6	4564.8	4473.3	4408.3	4389.0	4290.2	4201.2	4097.5	3977.1
7.5°	5022.6	5037.1	5005.7	4931.1	4808.2	4697.4	4680.5	4543.2	4401.0	4242.1	4078.3
10°	5379.1	5395.9	5347.7	5239.4	5099.7	4962.3	4938.2	4786.4	4617.8	4422.8	4213.2
12.5°	5677.8	5694.7	5632.0	5501.9	5347.7	5205.7	5181.6	5022.6	4837.1	4620.3	4360.1
15°	5904.2	5935.6	5851.2	5711.5	5545.2	5403.2	5391.1	5234.6	5053.9	4813.0	4535.9
17.5°	6036.7	6068.0	5988.6	5820.0	5677.8	5557.3	5542.9	5412.8	5244.2	5013.0	4707.0
20°	6058.4	6087.3	6003.0	5856.0	5738.1	5641.6	5634.4	5540.4	5417.6	5196.0	4892.5
22.5°	5993.4	6029.5	5952.4	5834.4	5752.5	5701.9	5692.2	5639.2	5569.3	5381.5	5066.0
25°	5925.9	5954.8	5897.0	5793.4	5750.0	5745.2	5752.5	5742.9	5728.4	5569.3	5268.3
27.5°	5921.1	5952.4	5887.4	5788.6	5764.5	5815.1	5822.3	5868.1	5880.1	5740.4	5463.4
30°	5962.0	5983.7	5921.1	5817.5	5805.5	5921.1	5923.5	6005.4	6024.6	5884.9	5656.2
32.5°	6051.2	6075.3	6012.6	5860.8	5844.0	6005.4	6012.6	6121.0	6152.4	6039.1	5858.5
35°	6260.7	6289.6	6217.3	5981.3	5921.1	6084.9	6106.5	6234.3	6296.9	6202.9	6068.0
37.5°	6783.4	6699.2	6600.4	6224.6	6096.9	6210.2	6246.2	6395.6	6506.5	6398.0	6318.5
40°	8081.9	7816.9	7508.5	6638.9	6405.2	6477.6	6506.5	6655.8	6807.5	6701.6	6663.0
42.5°	10030.6	9717.5	9221.3	7592.9	6870.2	6906.3	6928.0	7058.0	7272.5	7188.1	7197.8
45°	11767.5	11654.2	11148.4	9221.3	7739.8	7561.5	7588.1	7655.5	7971.0	7939.8	8002.4
47.5°	13102.1	13037.0	12646.8	11090.6	9209.2	8363.7	8438.4	8469.7	8925.0	9035.8	9204.4
50°	14128.2	14104.1	13754.9	12752.7	11129.1	9546.4	9573.0	9505.5	10187.3	10461.9	10782.3
52.5°	15096.6	15178.5	14920.7	14296.8	13179.1	11095.4	11090.6	10772.6	11692.8	12107.1	12653.9
55°	15971.0	15999.9	16026.4	15872.2	15241.1	12858.7	12812.9	12292.6	13439.3	13868.0	14460.6
57.5°	16792.5	16804.5	17040.6	17356.1	17387.5	14752.1	14667.9	14043.9	15347.1	15653.1	16016.8
60°	17344.1	17399.5	17898.1	18775.0	19158.0	16705.8	16659.9	16024.0	17288.7	17430.8	17363.4
62.5°	16549.1	16886.4	18143.8	19883.1	20829.7	18871.4	18849.6	18252.3	19331.4	19215.8	18637.7
65°	13395.9	13966.9	16178.2	20632.2	22470.3	21289.9	21321.2	20685.2	21429.6	21053.8	19673.5
67.5°	9370.7	9972.8	12588.9	20692.5	24303.5	24129.9	24310.6	23313.3	23657.8	22814.8	19919.2
70°	6479.9	6790.7	8493.8	19396.5	25731.9	28042.1	28037.2	26541.2	25874.1	23616.9	18666.6
72.5°	4357.7	4519.1	5516.3	15388.1	24681.6	30366.6	30226.9	29008.0	26620.8	22087.2	15250.8
75°	1838.0	1956.0	2553.5	8647.9	19526.6	27781.9	27403.7	25635.6	23653.0	17392.3	9515.2
77.5°	582.9	633.6	1007.0	3095.4	10755.7	20882.7	20482.9	16009.6	15853.0	8725.0	3478.4
80°	277.1	322.8	566.1	1243.0	4232.4	11358.0	11302.6	7262.8	6819.6	2355.9	698.5
82.5°	120.4	142.2	313.1	664.8	1893.4	4051.8	4133.7	2471.6	2045.2	893.7	214.4
85°	38.5	50.6	144.5	306.0	799.7	1007.0	994.9	587.7	823.9	486.6	74.7
87.5°	0.0	0.0	48.2	69.9	81.9	57.8	65.1	50.6	228.9	134.9	26.5
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°	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3
2.5°	3885.6	3847.0	3779.6	3717.0	3661.5	3606.2	3572.4	3524.3	3519.4	3519.4	3531.4
5°	3912.0	3849.4	3729.0	3601.3	3454.4	3314.6	3174.9	3040.0	2996.7	2965.3	2979.8
7.5°	3989.1	3890.4	3700.0	3456.8	3177.3	2871.4	2657.0	2425.8	2336.6	2288.4	2295.7
10°	4100.0	3965.0	3676.0	3249.7	2796.7	2379.9	2074.1	1823.6	1727.2	1686.2	1686.2
12.5°	4222.8	4056.6	3632.6	2991.9	2379.9	1881.4	1582.6	1467.0	1452.5	1452.5	1452.5
15°	4369.8	4167.4	3558.0	2688.4	1944.0	1488.7	1382.7	1387.5	1402.0	1411.6	1411.6
17.5°	4521.5	4285.4	3439.9	2348.7	1558.5	1339.4	1341.7	1349.0	1361.0	1370.6	1370.6
20°	4685.3	4403.5	3283.4	1987.4	1336.9	1296.0	1303.2	1310.5	1320.1	1324.9	1327.3
22.5°	4861.2	4514.3	3097.9	1633.2	1262.3	1259.8	1262.3	1269.5	1281.6	1281.6	1286.4
25°	5049.0	4637.1	2885.9	1375.4	1223.7	1223.7	1228.6	1233.4	1243.0	1243.0	1245.4
27.5°	5241.7	4750.4	2661.8	1240.6	1190.0	1187.6	1187.6	1194.8	1199.7	1202.0	1204.5
30°	5453.7	4882.9	2437.9	1211.7	1163.5	1151.5	1144.2	1149.0	1153.8	1156.3	1161.1
32.5°	5670.6	5010.5	2237.9	1223.7	1137.0	1115.3	1091.2	1086.4	1086.4	1096.0	1103.3
35°	5911.5	5150.2	2083.7	1264.6	1122.6	1062.3	1023.8	1002.1	1004.5	1019.0	1026.2
37.5°	6200.5	5318.8	1970.5	1300.8	1112.9	1002.1	939.5	913.0	896.2	913.0	908.2
40°	6578.8	5567.0	1888.6	1329.7	1100.8	932.2	848.0	804.5	773.3	782.9	778.1
42.5°	7135.1	5957.2	1857.3	1332.1	1074.4	850.3	754.0	696.2	650.4	652.8	643.2
45°	7915.7	6573.9	2018.6	1300.8	1016.6	761.2	655.2	578.1	549.2	542.0	532.4
47.5°	8985.3	7472.5	2392.0	1235.7	932.2	674.4	558.8	493.8	472.1	460.1	452.8
50°	10418.5	8626.3	2806.3	1163.5	848.0	592.6	479.4	438.4	423.9	411.9	409.5
52.5°	12080.6	9797.1	3146.0	1091.2	763.6	520.3	428.8	404.7	392.7	383.0	380.6
55°	13605.4	10604.0	3126.8	1014.1	681.7	462.5	392.7	378.2	363.8	354.1	349.3
57.5°	14554.6	10717.2	2577.6	929.9	587.7	416.8	359.0	349.3	332.4	320.4	318.0
60°	14990.6	10071.6	1806.7	819.1	493.8	373.4	322.8	318.0	296.3	279.4	274.6
62.5°	15070.1	8872.0	1204.5	681.7	411.9	332.4	286.7	279.4	250.5	221.6	207.2
65°	14747.3	7156.9	833.5	532.4	351.7	289.0	245.7	231.2	200.0	171.1	161.4
67.5°	13725.9	5025.0	580.6	383.0	298.7	228.9	195.2	190.3	166.3	142.2	134.9
70°	11854.2	2864.2	387.9	286.7	236.1	156.6	154.2	159.0	134.9	115.6	106.0
72.5°	9088.8	1310.5	240.9	209.6	161.4	106.0	122.9	125.3	103.6	86.7	77.1
75°	5350.2	561.3	151.8	134.9	81.9	69.9	89.2	91.5	69.9	55.5	48.2
77.5°	1821.1	212.0	96.4	79.5	41.0	38.5	57.8	57.8	38.5	21.7	16.9
80°	414.3	79.5	48.2	31.4	19.3	16.9	19.3	16.9	9.6	2.5	0.0
82.5°	118.1	31.4	19.3	12.1	7.3	7.3	2.5	0.0	0.0	0.0	0.0
85°	33.7	14.5	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)