

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: P965284

Luminaire Tested: **NAV-SB3D-835-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965284
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-835-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29416.5 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

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



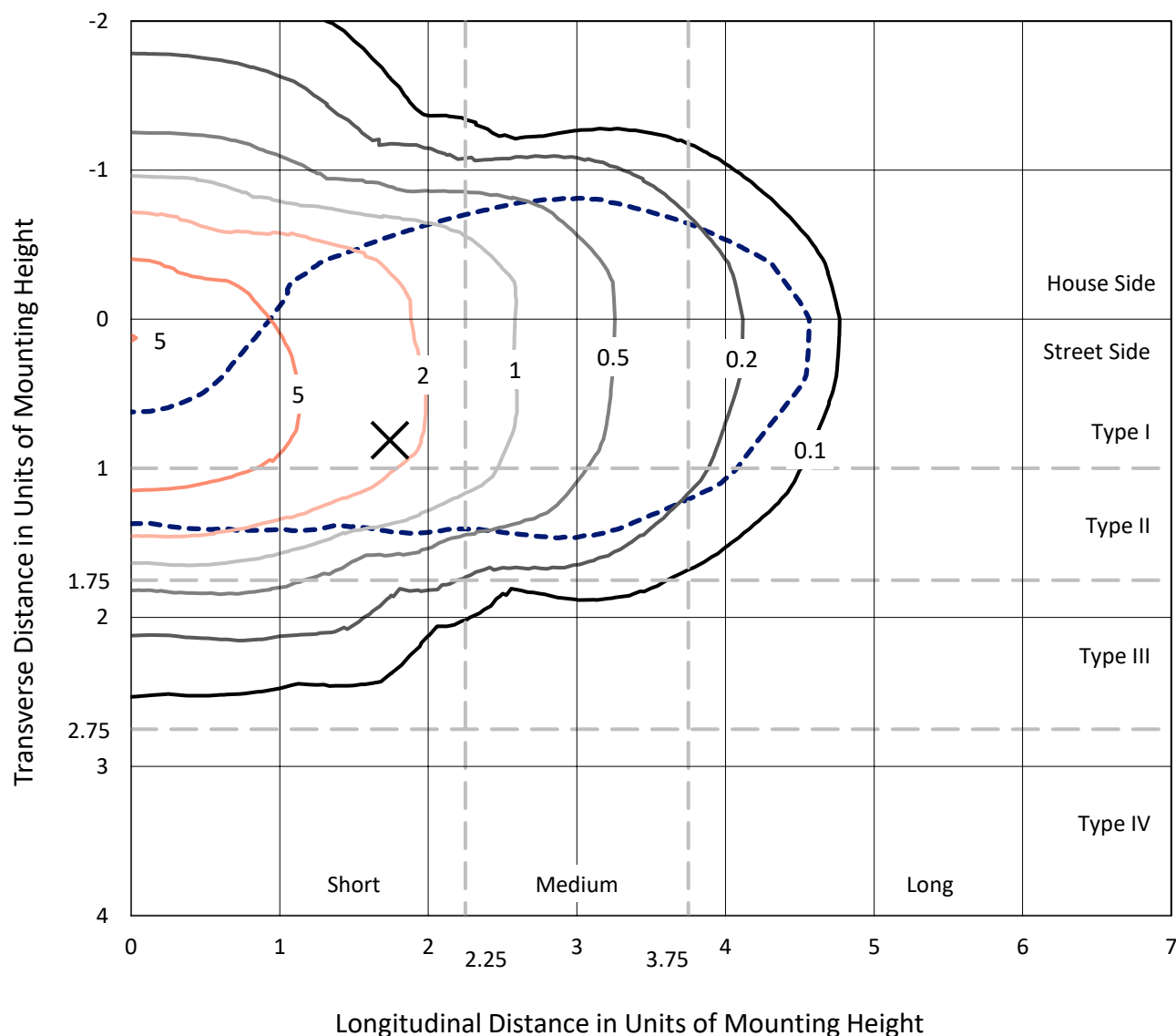
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



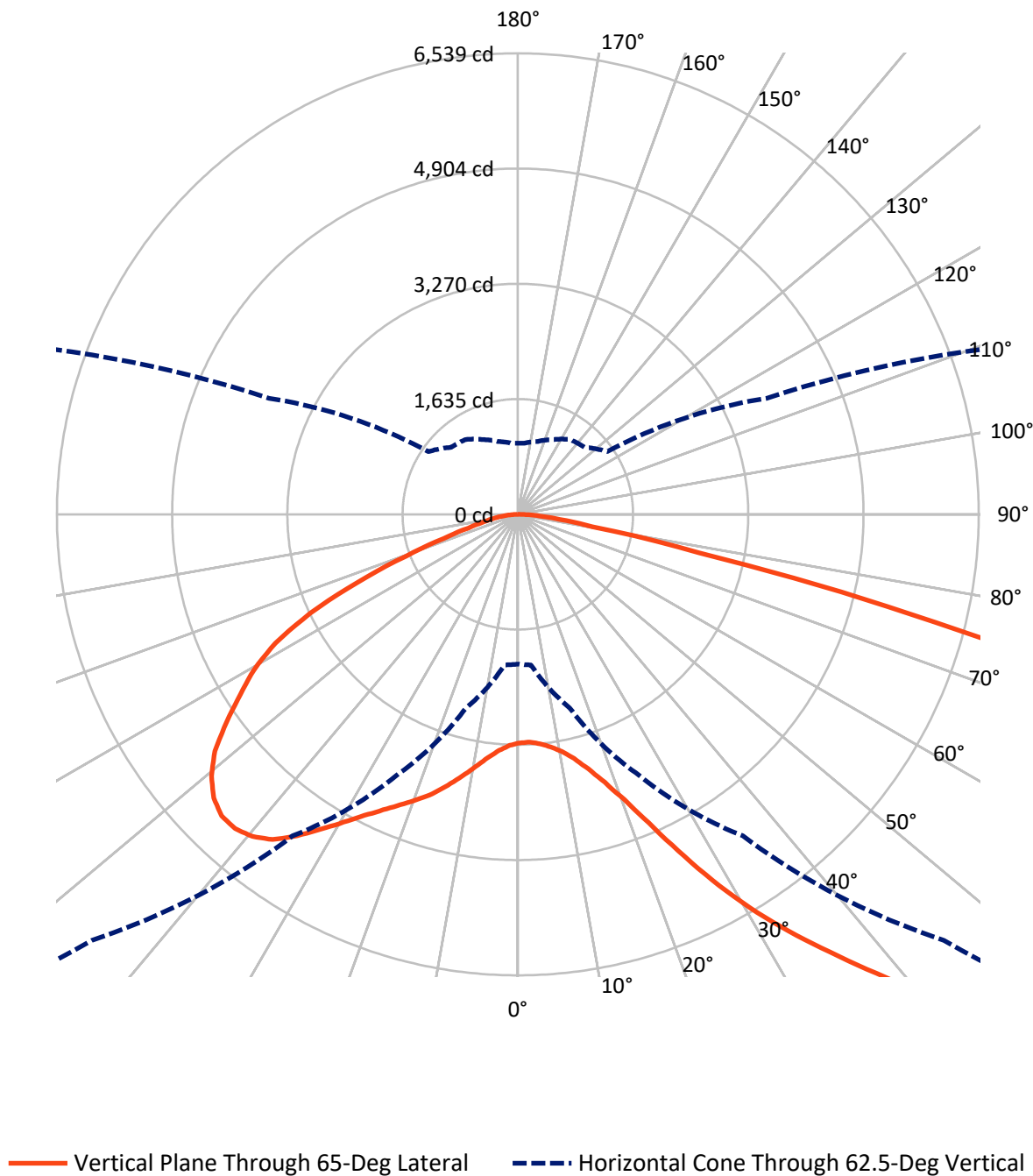
Based on 25 foot mounting height. Maximum calculated value = 8.2 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9282.5	0.0	9282.5
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	20133.9	0.0	20133.9
	% Fixture	68.4	0.0	68.4
Total	Lumens	29416.5	0.0	29416.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.2	1.1
10°-20°	1095.9	3.7
20°-30°	2222.1	7.6
30°-40°	3845.3	13.1
40°-50°	5819.2	19.8
50°-60°	6822.6	23.2
60°-70°	5720.0	19.4
70°-80°	3157.9	10.7
80°-90°	410.2	1.4
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°	29416.5	100.0
0°-180°	29416.5	100.0

Coefficient of Utilization



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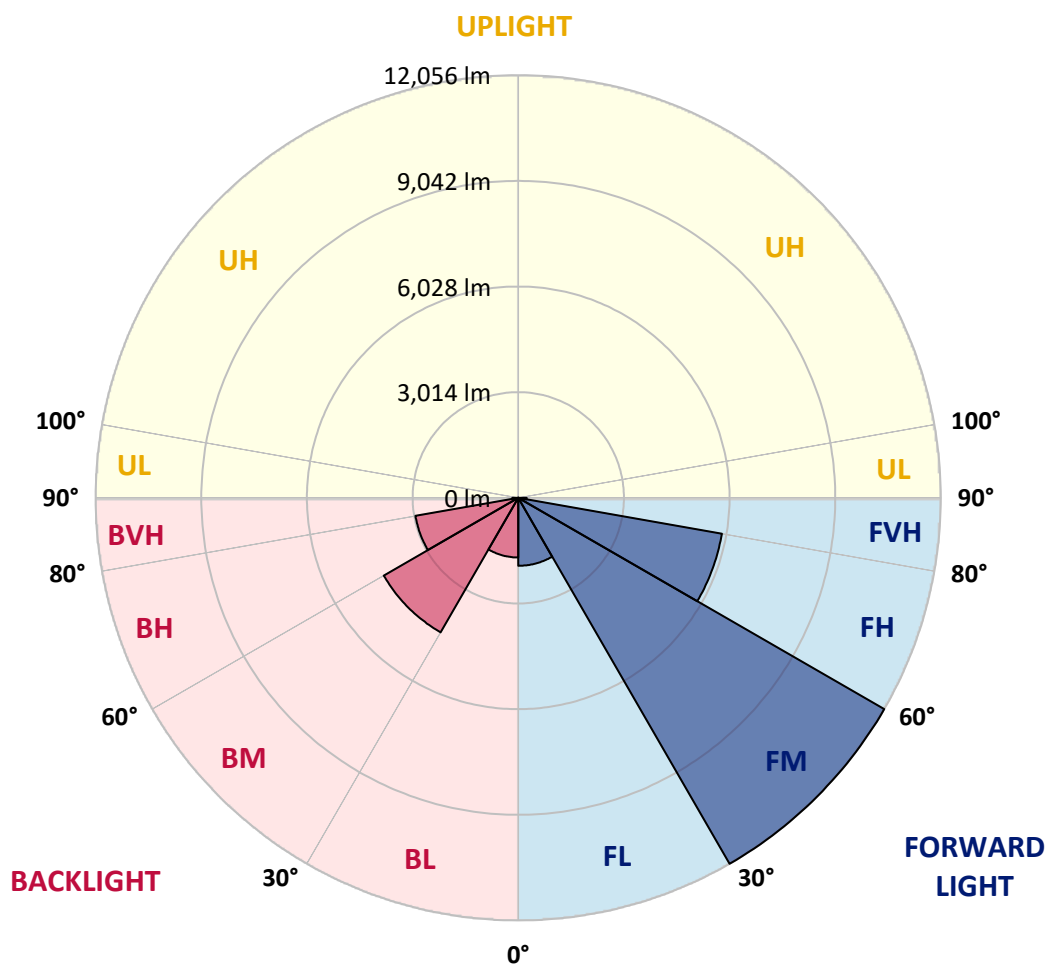
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1938.9	6.6			
FM	(30°-60°)	12055.8	41.0			
FH	(60°-80°)	5900.1	20.1			G3/7500
FVH	(80°-90°)	239.1	0.8			G3/500
BL	(0°-30°)	1702.3	5.8	B3/2500		
BM	(30°-60°)	4431.4	15.1	B3/5000		
BH	(60°-80°)	2977.8	10.1	B4/5000		G4/5000
BVH	(80°-90°)	171.1	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6
2.5°	3220.2	3211.0	3218.7	3218.7	3221.7	3220.2	3230.9	3234.0	3238.5	3247.7	3247.7
5°	3188.2	3186.6	3200.4	3212.6	3224.8	3235.4	3249.2	3269.0	3272.1	3282.8	3296.5
7.5°	3177.5	3168.3	3189.7	3205.0	3234.0	3259.9	3296.5	3330.1	3343.9	3348.4	3374.3
10°	3259.9	3244.6	3264.4	3273.6	3298.0	3324.0	3366.7	3420.1	3435.4	3453.7	3482.7
12.5°	3400.3	3383.5	3412.5	3426.3	3449.1	3472.0	3501.0	3552.9	3560.5	3594.2	3621.6
15°	3592.6	3572.7	3591.1	3607.9	3646.0	3667.3	3696.4	3746.7	3746.7	3772.7	3792.5
17.5°	3853.6	3827.7	3841.4	3847.4	3871.8	3903.9	3952.8	3997.0	4019.9	4010.7	3983.3
20°	4242.7	4210.7	4210.7	4180.2	4171.0	4197.0	4261.0	4322.1	4346.5	4299.2	4232.0
22.5°	4827.2	4781.4	4755.5	4651.8	4610.6	4613.6	4677.7	4752.5	4772.3	4688.3	4537.3
25°	5570.5	5498.7	5463.7	5311.0	5218.0	5137.1	5187.4	5283.6	5311.0	5207.3	4963.0
27.5°	6313.7	6318.3	6284.7	6101.6	5947.5	5799.4	5773.5	5874.2	5903.2	5785.7	5483.5
30°	7356.1	7247.8	7183.6	6963.8	6744.1	6536.5	6429.7	6470.9	6478.5	6338.2	5987.1
32.5°	8255.0	8227.6	8090.2	7897.9	7615.5	7290.5	7112.0	7046.3	7034.1	6834.2	6417.5
35°	9279.0	9263.8	9118.8	8889.9	8584.7	8133.0	7810.9	7623.1	7608.0	7327.1	6843.3
37.5°	10319.9	10319.9	10177.9	9927.6	9611.7	9047.1	8557.2	8259.6	8210.8	7844.4	7276.8
40°	11150.2	11099.7	11125.8	11020.4	10658.7	10058.9	9385.9	8954.0	8888.4	8448.9	7737.6
42.5°	11621.8	11604.9	11760.6	11878.1	11730.1	11250.9	10298.6	9706.3	9614.8	9114.2	8268.8
45°	11727.0	11708.7	11986.5	12416.8	12624.4	12427.5	11290.6	10498.5	10387.0	9810.2	8838.0
47.5°	11484.4	11447.7	11855.3	12534.4	13199.7	13546.2	12365.0	11357.7	11196.0	10487.8	9422.5
50°	10754.8	10719.8	11336.3	12238.3	13393.6	14306.2	13530.9	12268.8	12021.6	11214.2	10013.1
52.5°	9169.1	9185.9	10152.0	11391.2	13138.8	14779.4	14535.2	13228.8	12931.2	11957.4	10567.1
55°	7142.4	7179.1	8366.5	9730.8	12119.3	14707.6	15220.4	14217.8	13921.7	12656.5	11139.5
57.5°	5114.1	5276.0	6388.5	7739.2	10161.2	13570.6	15370.0	15157.8	14870.9	13419.5	11699.6
60°	3314.8	3343.9	4488.5	5849.8	7737.6	11550.0	15066.3	15870.6	15646.2	14197.9	12168.1
62.5°	2124.4	2144.3	2841.7	4091.6	5568.9	8545.0	14043.7	16180.3	16111.7	14712.2	12618.3
65°	1561.3	1546.0	1909.3	2704.4	3751.3	5269.8	12058.2	16030.8	16166.6	15034.2	12990.6
67.5°	1303.4	1282.0	1460.5	1872.6	2763.9	2992.8	8921.9	15058.7	15556.2	14997.6	13263.9
70°	1187.4	1169.0	1277.4	1390.3	2156.5	2003.9	4497.6	13091.4	13857.6	14580.9	13219.6
72.5°	1005.7	973.6	1121.8	1234.7	1677.2	1536.9	1858.8	10055.9	10989.8	13245.6	12596.9
75°	779.8	758.5	885.2	1086.6	1260.6	1199.6	1175.2	6106.1	7125.7	10243.6	11020.4
77.5°	618.1	589.1	705.1	847.1	1134.0	905.0	856.2	2629.5	3639.9	6539.6	8245.8
80°	465.5	439.5	535.7	669.9	871.5	682.2	554.0	1072.9	1372.1	3313.3	4146.5
82.5°	331.2	308.3	373.9	491.4	586.1	612.0	340.3	601.3	676.1	1277.4	926.4
85°	212.2	198.4	250.3	308.3	372.4	393.7	207.6	314.4	344.9	526.5	386.1
87.5°	116.0	94.6	134.3	143.5	172.5	157.2	99.2	114.5	123.6	190.8	163.3
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°	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6
2.5°	3253.8	3258.4	3273.6	3278.2	3288.9	3302.7	3311.8	3320.9	3320.9	3330.1	3330.1
5°	3298.0	3308.7	3340.8	3357.6	3385.1	3412.5	3429.2	3449.1	3461.3	3467.5	3470.4
7.5°	3383.5	3400.3	3446.0	3475.1	3522.4	3560.5	3586.5	3613.9	3620.1	3636.8	3630.8
10°	3499.5	3519.3	3571.2	3626.1	3682.6	3730.0	3754.4	3774.2	3781.8	3784.9	3777.2
12.5°	3632.3	3661.3	3728.4	3795.6	3855.1	3896.3	3902.4	3897.8	3876.4	3858.1	3858.1
15°	3795.6	3821.5	3896.3	3969.5	4027.5	4035.2	3997.0	3972.6	3946.7	3942.0	3942.0
17.5°	3990.9	4004.7	4073.3	4145.1	4149.6	4123.7	4067.2	4044.3	4019.9	4003.1	4004.7
20°	4218.3	4213.8	4262.6	4293.1	4261.0	4181.7	4096.2	4058.1	4033.7	4013.8	4015.3
22.5°	4490.0	4454.9	4448.8	4441.1	4355.6	4189.3	4073.3	4024.5	3986.3	3958.9	3968.0
25°	4885.3	4751.0	4657.8	4605.9	4413.6	4148.1	4000.1	3891.7	3820.0	3772.7	3791.0
27.5°	5379.7	5153.8	4918.8	4792.2	4413.6	4064.1	3823.0	3647.6	3530.0	3481.2	3505.6
30°	5851.3	5614.7	5268.3	5016.5	4403.0	3926.8	3537.7	3293.4	3156.1	3107.3	3136.3
32.5°	6254.2	5996.2	5639.1	5262.2	4377.1	3704.0	3183.5	2913.5	2780.6	2722.7	2751.7
35°	6628.2	6353.5	6011.5	5532.3	4308.4	3377.4	2794.4	2588.3	2440.3	2347.2	2377.8
37.5°	7011.2	6684.6	6364.1	5776.5	4184.8	2995.9	2495.3	2319.8	2145.7	2020.7	2054.2
40°	7427.9	7037.1	6741.0	5921.5	3981.7	2632.6	2263.3	2103.1	1918.4	1785.7	1811.6
42.5°	7914.6	7459.8	7160.8	5996.2	3704.0	2374.7	2112.2	1955.0	1781.0	1672.7	1694.0
45°	8422.9	7925.4	7543.8	5994.8	3394.2	2254.2	2063.3	1907.7	1715.4	1602.5	1620.8
47.5°	8955.5	8412.2	7875.0	5897.1	3125.5	2270.9	2035.9	1805.4	1593.4	1483.4	1498.7
50°	9489.7	8944.9	8195.5	5714.0	3011.1	2234.3	1933.7	1662.0	1411.7	1312.5	1318.6
52.5°	10019.3	9511.1	8471.7	5453.0	2895.1	2098.5	1802.4	1475.8	1336.9	1268.2	1268.2
55°	10551.9	10071.1	8772.4	5072.9	2605.1	1939.7	1582.6	1405.6	1277.4	1214.8	1208.7
57.5°	11086.0	10718.2	9057.7	4693.0	2240.4	1744.4	1462.1	1320.1	1217.9	1164.5	1155.3
60°	11641.5	11458.5	9352.3	4343.4	1880.3	1494.1	1373.5	1251.4	1147.7	1088.1	1083.5
62.5°	12213.9	12273.3	9582.7	3893.3	1549.1	1341.5	1294.2	1169.0	1068.4	1011.9	1010.3
65°	12790.8	13059.3	9733.8	3269.0	1256.0	1196.5	1208.7	1079.0	976.7	927.9	926.4
67.5°	13225.7	13625.5	9691.2	2473.9	1030.1	1059.1	1101.9	984.4	888.3	850.0	851.6
70°	13274.6	13558.4	9269.9	1694.0	862.3	924.9	982.9	891.2	792.1	764.6	766.1
72.5°	12624.4	12642.8	8096.3	1106.5	729.5	811.9	857.7	796.6	700.5	673.0	671.5
75°	10919.7	10455.7	5944.4	729.5	610.5	697.4	740.2	697.4	604.3	610.5	589.1
77.5°	8273.3	7404.9	3609.3	518.9	509.7	586.1	644.0	613.6	534.1	599.8	528.1
80°	4262.6	4006.2	1610.1	387.7	402.9	468.5	529.6	489.8	422.7	402.9	367.8
82.5°	976.7	1135.5	634.9	277.8	291.5	337.3	404.5	367.8	303.7	256.4	253.4
85°	341.8	373.9	280.8	173.9	171.0	210.6	274.7	245.7	206.0	164.8	173.9
87.5°	108.3	142.0	105.3	70.2	73.3	94.6	126.7	116.0	96.1	62.5	65.6
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)