

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: P965134

Luminaire Tested: **NAV-SB3D-740-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965134
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-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33132.1 lumens
Efficiency: N/A
Efficacy: 151.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - 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

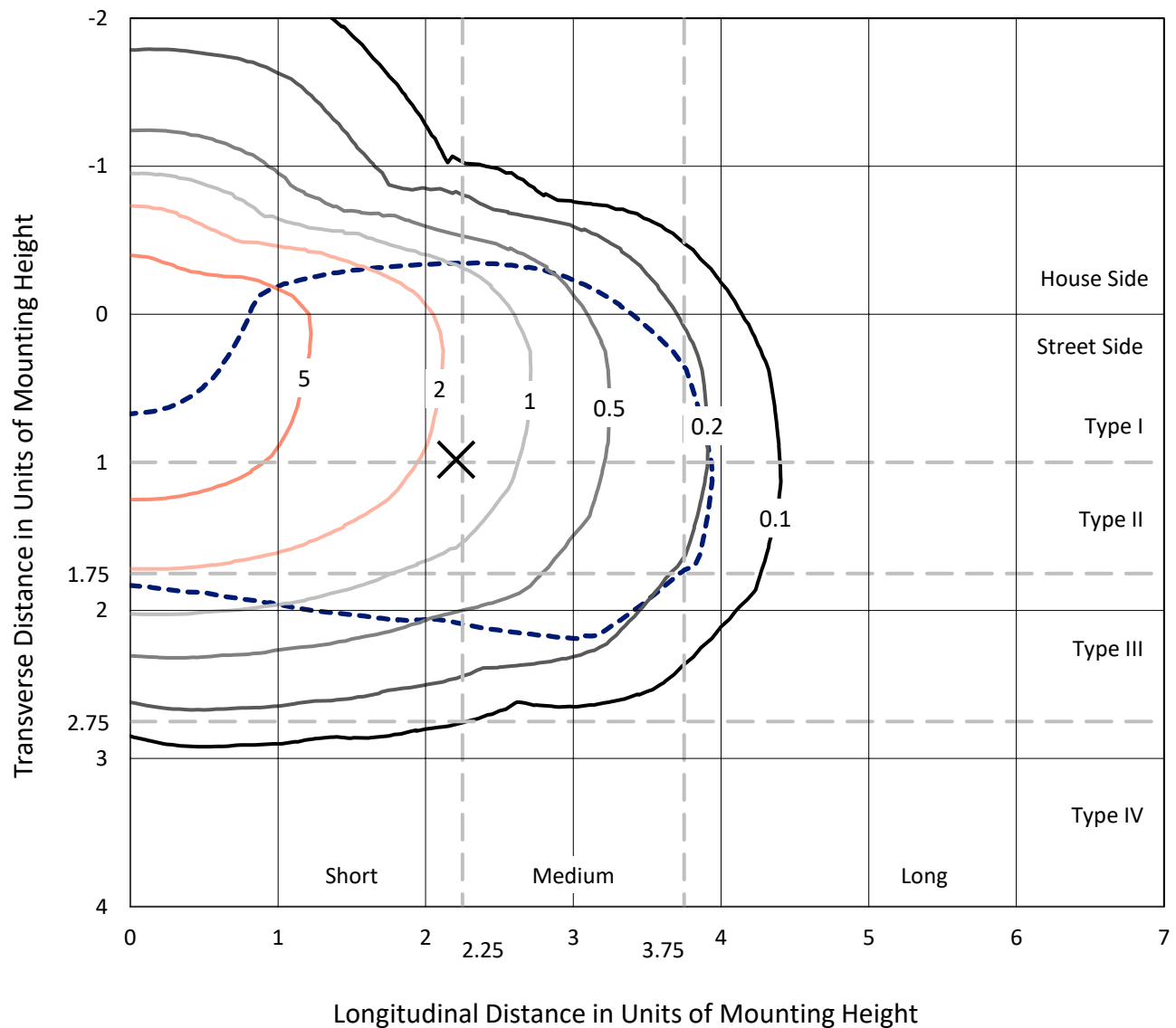


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Iso-Footcandle Lines of Horizontal Illumination

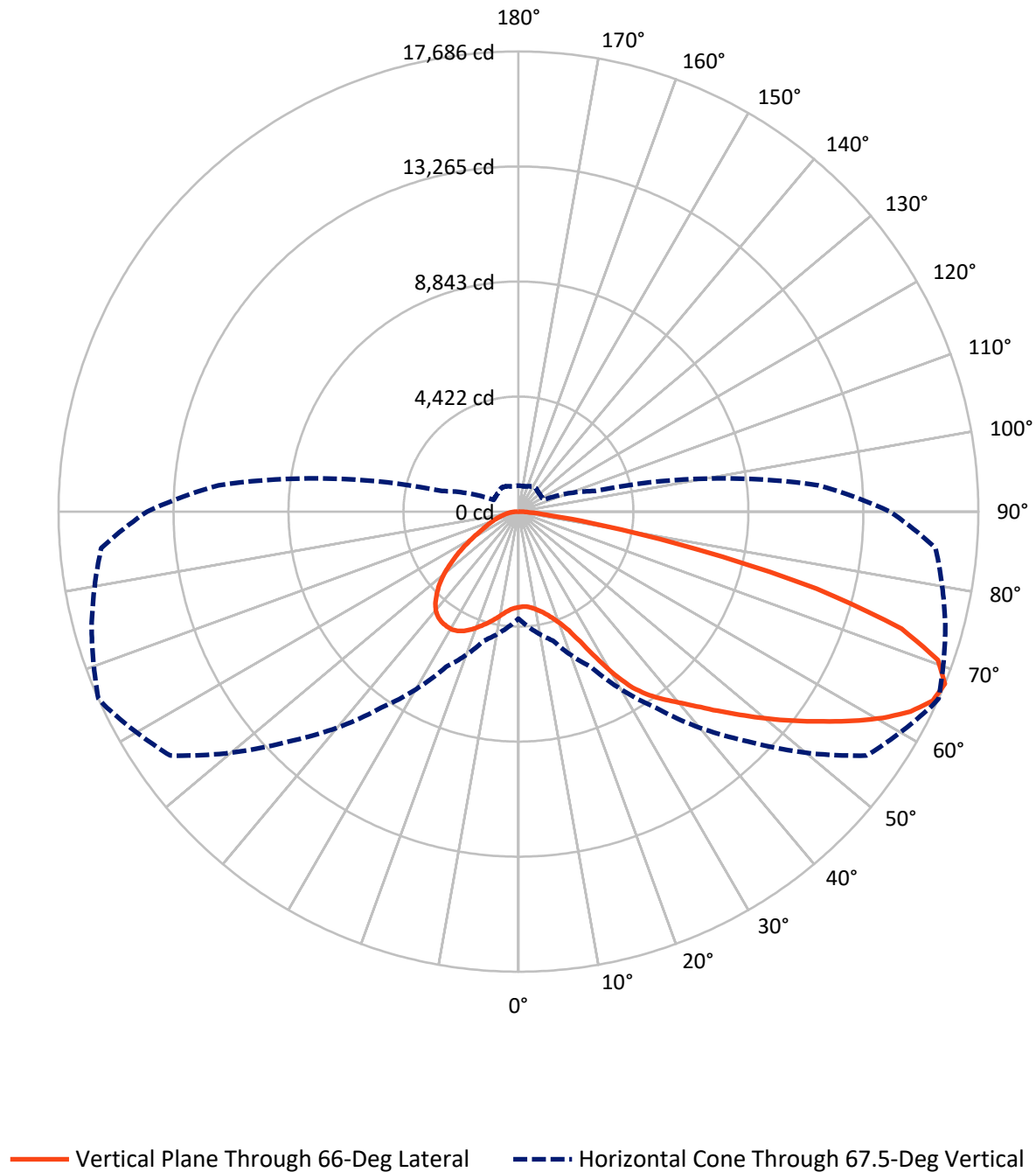
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 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	8238.2	0.0	8238.2
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	24893.9	0.0	24893.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	33132.1	0.0	33132.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.3	1.1
10°-20°	1203.7	3.6
20°-30°	2320.1	7.0
30°-40°	4068.0	12.3
40°-50°	6047.8	18.3
50°-60°	7666.2	23.1
60°-70°	7501.2	22.6
70°-80°	3578.2	10.8
80°-90°	382.4	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°	33132.1	100.0
0°-180°	33132.1	100.0

Coefficient of Utilization



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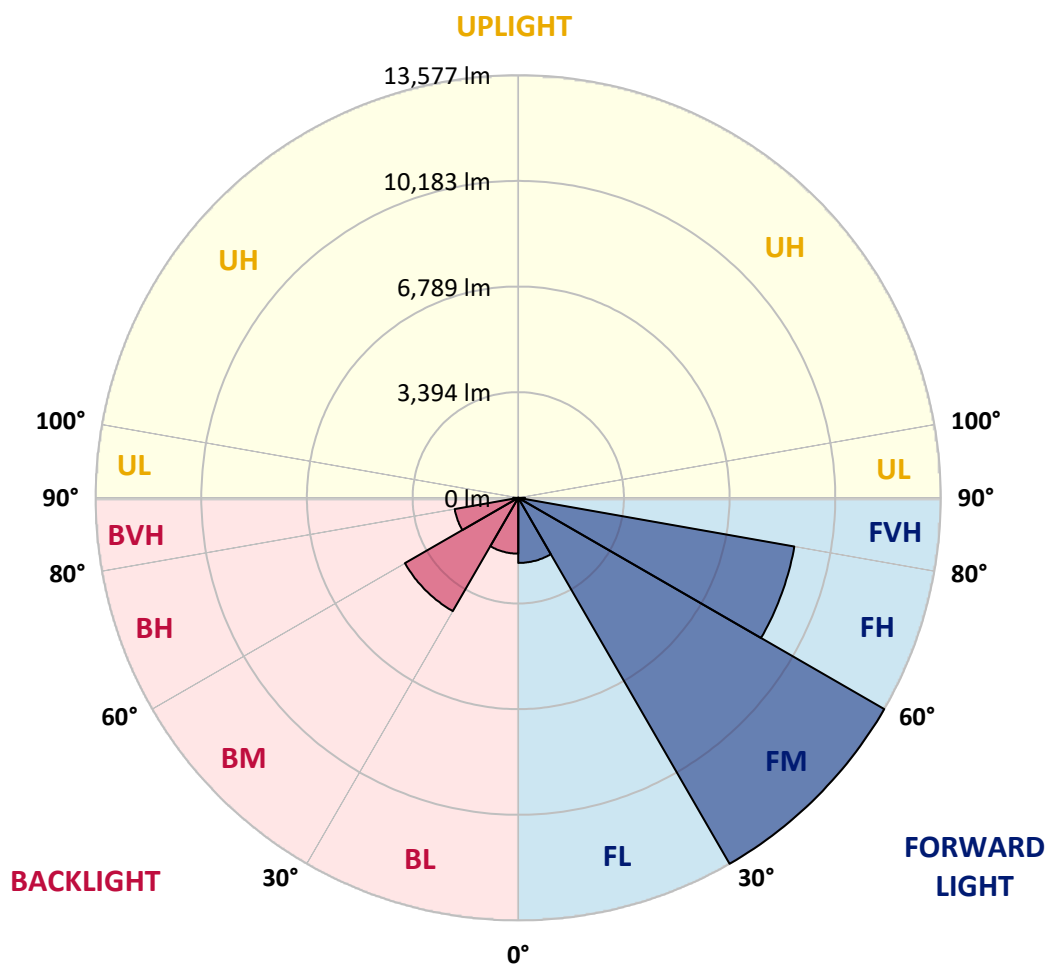
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2093.6	6.3			
FM	(30°-60°)	13577.3	41.0			
FH	(60°-80°)	9006.2	27.2			G4/12000
FVH	(80°-90°)	216.8	0.7			G2/225
BL	(0°-30°)	1794.6	5.4	B3/2500		
BM	(30°-60°)	4204.9	12.7	B3/5000		
BH	(60°-80°)	2073.2	6.3	B3/2500		G3/2500
BVH	(80°-90°)	165.6	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-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8
2.5°	3636.5	3657.4	3652.2	3643.5	3641.7	3645.2	3650.4	3655.7	3653.9	3662.6	3676.6
5°	3626.0	3647.0	3645.2	3645.2	3652.2	3666.1	3674.8	3683.5	3674.8	3685.2	3704.3
7.5°	3633.0	3648.7	3655.7	3662.6	3680.1	3706.1	3727.0	3746.2	3735.7	3747.9	3772.3
10°	3721.8	3734.0	3740.9	3740.9	3753.1	3782.8	3803.6	3838.4	3829.7	3848.9	3880.2
12.5°	3883.7	3895.8	3895.8	3889.0	3897.6	3916.7	3923.7	3962.0	3946.4	3977.7	4009.0
15°	4082.2	4106.5	4087.4	4075.2	4078.7	4097.8	4096.1	4125.6	4109.9	4136.1	4164.0
17.5°	4301.5	4332.8	4301.5	4299.8	4292.8	4313.6	4315.4	4341.5	4313.6	4332.8	4351.9
20°	4560.8	4604.4	4578.3	4587.0	4571.3	4580.0	4588.7	4627.0	4583.5	4597.4	4592.2
22.5°	4926.5	4978.6	4950.8	4983.9	4973.4	4966.4	4964.7	5032.6	4964.7	4969.9	4919.5
25°	5459.0	5521.8	5473.0	5518.3	5518.3	5540.9	5567.0	5654.1	5540.9	5507.8	5377.3
27.5°	6245.9	6308.6	6212.8	6240.7	6232.0	6287.7	6259.9	6475.7	6353.9	6299.9	6037.0
30°	7192.9	7304.4	7123.2	7116.3	7107.7	7196.4	7236.4	7379.2	7255.6	7201.6	6884.8
32.5°	8216.5	8333.1	8117.3	8054.6	8021.5	8075.5	8042.4	8157.3	8072.0	7988.4	7596.8
35°	9299.2	9414.1	9208.7	9086.8	8954.6	8841.4	8723.1	8752.7	8672.5	8545.5	8139.9
37.5°	10322.9	10533.4	10315.9	10185.3	9941.6	9720.5	9389.8	9252.3	9177.4	9060.8	8651.7
40°	11365.5	11485.6	11320.3	11208.9	10944.3	10597.9	10068.7	9778.0	9677.0	9563.9	9217.4
42.5°	12133.2	12248.1	12159.4	12082.8	11875.6	11473.4	10789.4	10425.6	10279.3	10152.2	9858.0
45°	12742.5	12827.8	12772.1	12800.0	12711.2	12321.2	11536.2	11120.1	10968.6	10813.7	10582.2
47.5°	12988.0	13078.5	13167.3	13332.7	13484.1	13196.9	12338.6	11872.2	11712.0	11553.6	11325.5
50°	12960.1	13052.3	13310.0	13661.6	14131.7	14035.9	13184.7	12672.9	12524.9	12343.9	12133.2
52.5°	12737.3	12841.7	13172.5	13757.3	14505.9	14664.4	14046.4	13499.8	13360.5	13144.6	12934.0
55°	12152.4	12215.0	12711.2	13539.8	14594.7	15103.0	14890.7	14380.5	14241.4	13940.2	13710.4
57.5°	11067.8	11158.4	11880.9	12953.1	14371.9	15400.7	15632.2	15306.6	15172.7	14739.2	14498.9
60°	9652.6	9797.2	10624.0	11967.9	13804.4	15399.0	16305.9	16217.1	16105.7	15526.0	15275.4
62.5°	8051.1	8218.2	9013.7	10575.2	12812.2	14962.0	16727.2	16979.5	16922.1	16251.9	15931.6
65°	6183.2	6298.1	7090.2	8773.5	11268.0	14023.7	16775.9	17500.0	17510.5	16803.7	16274.5
67.5°	4116.9	4447.7	5135.4	6583.7	9200.0	12490.1	16347.6	17585.4	17686.4	16993.5	16102.2
70°	2008.9	2444.0	3117.7	4278.9	6583.7	10138.3	15228.3	16885.5	17110.1	16440.0	15075.2
72.5°	833.8	974.9	1342.1	2111.6	3779.3	6841.3	12979.3	14988.2	15404.2	14566.9	12674.6
75°	562.3	609.3	767.7	1082.8	1721.6	3373.6	9360.2	11175.8	11846.0	11001.7	8992.8
77.5°	433.5	463.1	558.8	757.3	1023.6	1276.0	5010.0	6735.1	7081.5	6555.8	4679.2
80°	341.2	363.8	417.8	551.9	725.9	682.3	1707.8	3051.6	3251.8	2727.8	1504.1
82.5°	295.9	304.6	299.4	374.2	482.2	398.6	560.6	1126.3	1242.9	901.7	490.9
85°	214.1	238.5	249.0	231.5	255.9	201.9	229.8	398.6	438.7	391.7	276.8
87.5°	87.0	128.8	158.4	149.8	94.0	57.4	71.3	116.6	134.1	146.3	90.5
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°	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8	3674.8
2.5°	3678.3	3690.4	3699.1	3709.6	3716.5	3727.0	3747.9	3760.1	3761.9	3770.6	3768.8
5°	3711.3	3728.7	3747.9	3775.8	3807.1	3833.2	3873.3	3901.0	3911.5	3920.2	3918.5
7.5°	3782.8	3807.1	3841.9	3890.7	3935.9	3970.7	4019.4	4052.5	4085.6	4097.8	4099.5
10°	3889.0	3923.7	3974.2	4040.3	4089.1	4134.3	4184.9	4212.6	4245.8	4259.7	4266.7
12.5°	4021.2	4057.8	4123.9	4216.1	4261.4	4292.8	4310.1	4303.3	4310.1	4322.3	4325.8
15°	4172.7	4212.6	4287.6	4386.8	4418.1	4390.3	4351.9	4317.1	4311.9	4315.4	4327.5
17.5°	4351.9	4381.6	4468.6	4552.1	4529.5	4414.6	4331.0	4275.4	4247.5	4238.8	4251.0
20°	4602.7	4602.7	4674.0	4726.2	4574.8	4379.8	4249.2	4158.7	4101.2	4076.9	4071.7
22.5°	4907.3	4879.4	4924.7	4888.1	4566.1	4282.3	4101.2	3944.6	3857.6	3822.7	3817.5
25°	5293.7	5260.6	5248.4	5022.2	4503.4	4127.4	3833.2	3643.5	3566.9	3547.7	3551.2
27.5°	5876.8	5793.3	5634.9	5095.3	4388.5	3883.7	3519.8	3344.1	3300.5	3302.2	3307.5
30°	6653.3	6486.1	6097.9	5107.5	4200.6	3539.0	3199.5	3074.2	3053.4	3062.0	3091.6
32.5°	7372.2	7213.7	6571.5	5051.7	3911.5	3201.3	2912.3	2828.8	2797.4	2807.9	2821.8
35°	7936.3	7892.7	7010.1	4973.4	3556.4	2884.5	2654.6	2583.3	2522.4	2508.5	2518.9
37.5°	8468.9	8451.5	7339.1	4863.7	3204.8	2659.9	2447.5	2353.5	2264.7	2216.0	2217.8
40°	9053.8	9036.4	7555.0	4694.9	2893.2	2464.9	2261.3	2137.6	2028.0	1939.2	1947.9
42.5°	9711.8	9609.1	7657.7	4452.9	2628.6	2299.6	2109.9	1942.7	1798.3	1716.4	1721.6
45°	10430.7	10199.3	7655.9	4144.8	2405.8	2148.1	1947.9	1711.2	1577.2	1500.6	1497.1
47.5°	11193.2	10763.2	7561.9	3803.6	2189.9	1981.0	1697.3	1516.2	1427.4	1380.5	1370.0
50°	11980.1	11290.7	7401.8	3411.9	1968.8	1791.3	1540.6	1417.0	1349.1	1305.5	1290.0
52.5°	12719.8	11769.5	7208.6	2968.0	1744.2	1606.8	1471.0	1375.2	1303.8	1255.1	1234.2
55°	13407.5	12182.0	6935.3	2513.7	1561.5	1483.2	1437.9	1357.8	1276.0	1218.5	1195.9
57.5°	14018.5	12450.1	6463.5	2087.2	1430.9	1397.9	1403.0	1328.2	1234.2	1185.5	1154.1
60°	14526.8	12646.8	5765.4	1692.1	1324.7	1314.3	1349.1	1272.5	1162.9	1107.1	1082.8
62.5°	14831.4	12643.3	4909.0	1385.7	1234.2	1237.7	1277.8	1202.8	1091.4	1039.2	1023.6
65°	14805.3	12333.4	3969.0	1185.5	1147.2	1150.7	1202.8	1126.3	1032.3	1000.9	999.2
67.5°	14281.3	11577.9	3044.7	1054.9	1051.4	1067.1	1128.0	1074.1	995.7	992.2	997.4
70°	12862.6	10009.5	2193.4	950.5	952.2	974.9	1054.9	1041.0	976.6	983.6	981.8
72.5°	10314.2	7631.5	1472.7	840.8	842.6	879.1	985.3	1014.9	957.5	1049.7	1063.6
75°	6869.1	4759.3	947.0	724.2	725.9	773.0	924.3	964.4	905.2	1046.2	1054.9
77.5°	3300.5	2139.4	685.8	609.3	609.3	652.8	799.0	863.5	771.2	812.9	745.1
80°	1140.2	804.2	539.7	490.9	480.4	510.0	673.7	748.6	665.0	612.7	574.4
82.5°	449.2	417.8	433.5	381.2	346.4	365.5	524.0	618.0	489.1	442.2	440.4
85°	257.7	271.5	306.4	252.5	200.2	224.6	384.7	443.9	369.0	325.5	332.5
87.5°	69.6	95.7	141.0	130.6	90.5	95.7	182.8	245.5	212.4	163.6	168.8
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)