

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: P884439

Luminaire Tested: **NAV-SB5B-730-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28146 lumens
Efficiency: N/A
Efficacy: 154.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

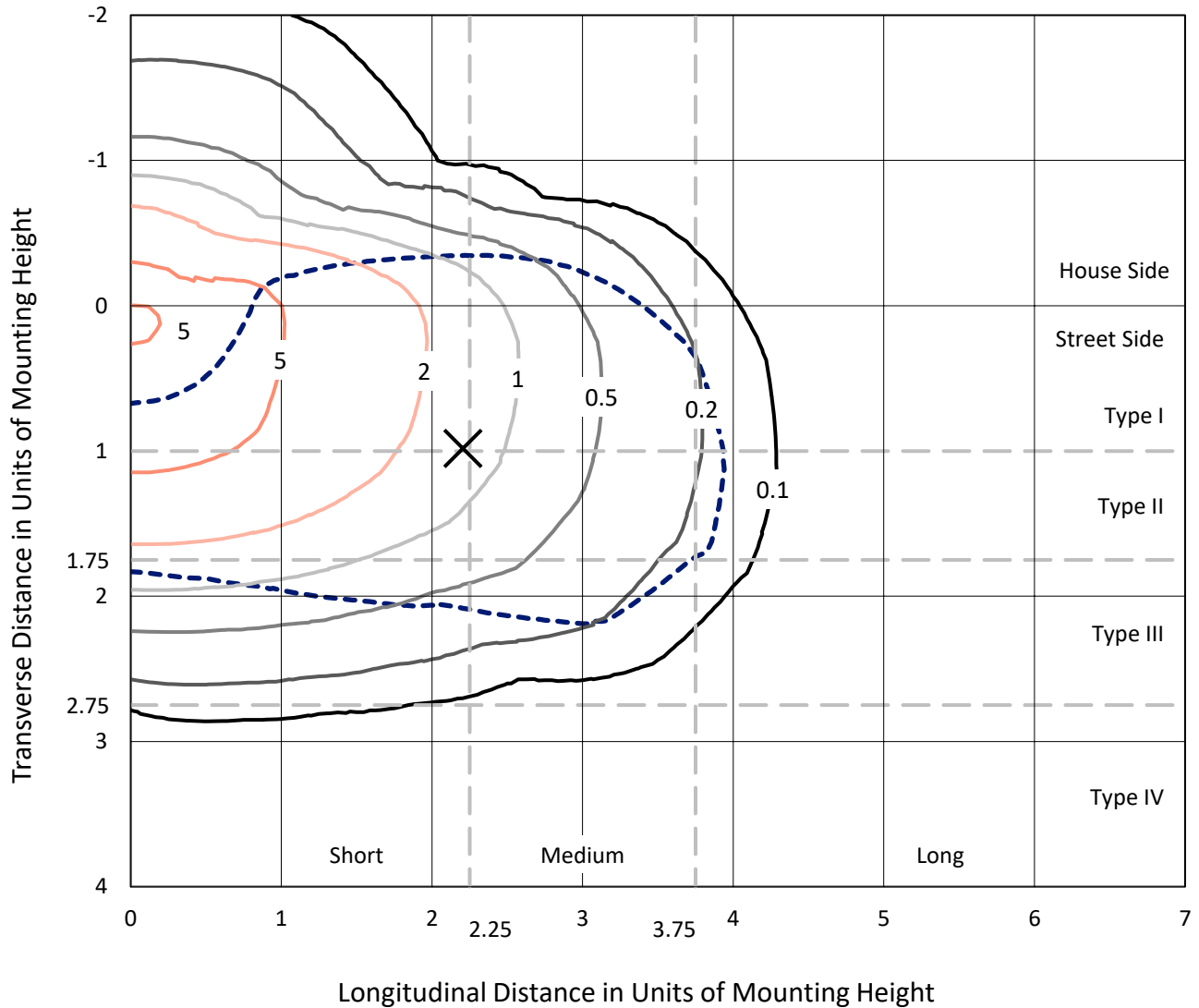
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

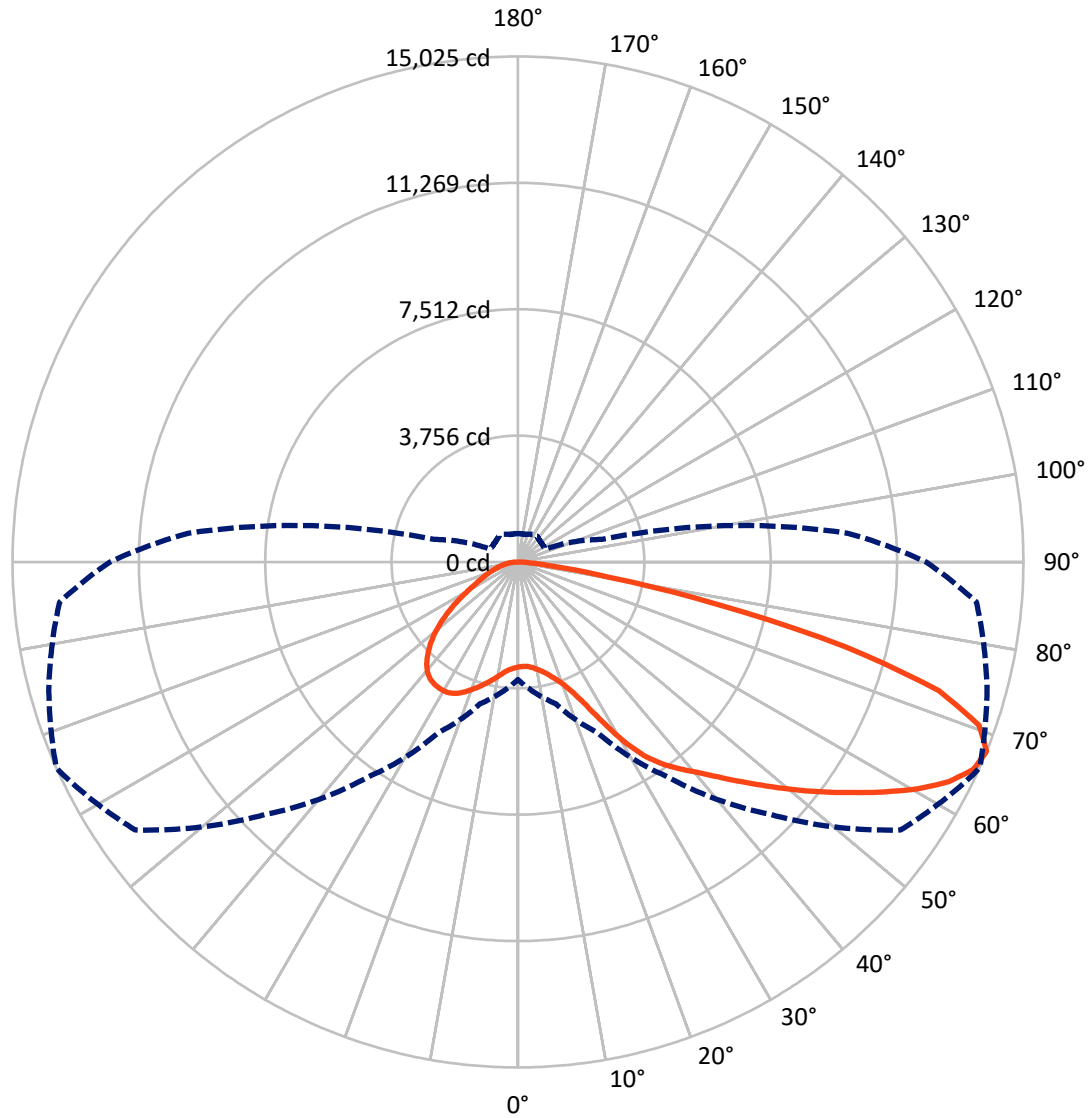
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6998.4	0.0	6998.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	21147.6	0.0	21147.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	28146.0	0.0	28146.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.5	1.1
10°-20°	1022.6	3.6
20°-30°	1971.0	7.0
30°-40°	3455.8	12.3
40°-50°	5137.7	18.3
50°-60°	6512.5	23.1
60°-70°	6372.3	22.6
70°-80°	3039.7	10.8
80°-90°	324.9	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°	28146.0	100.0
0°-180°	28146.0	100.0

Coefficient of Utilization



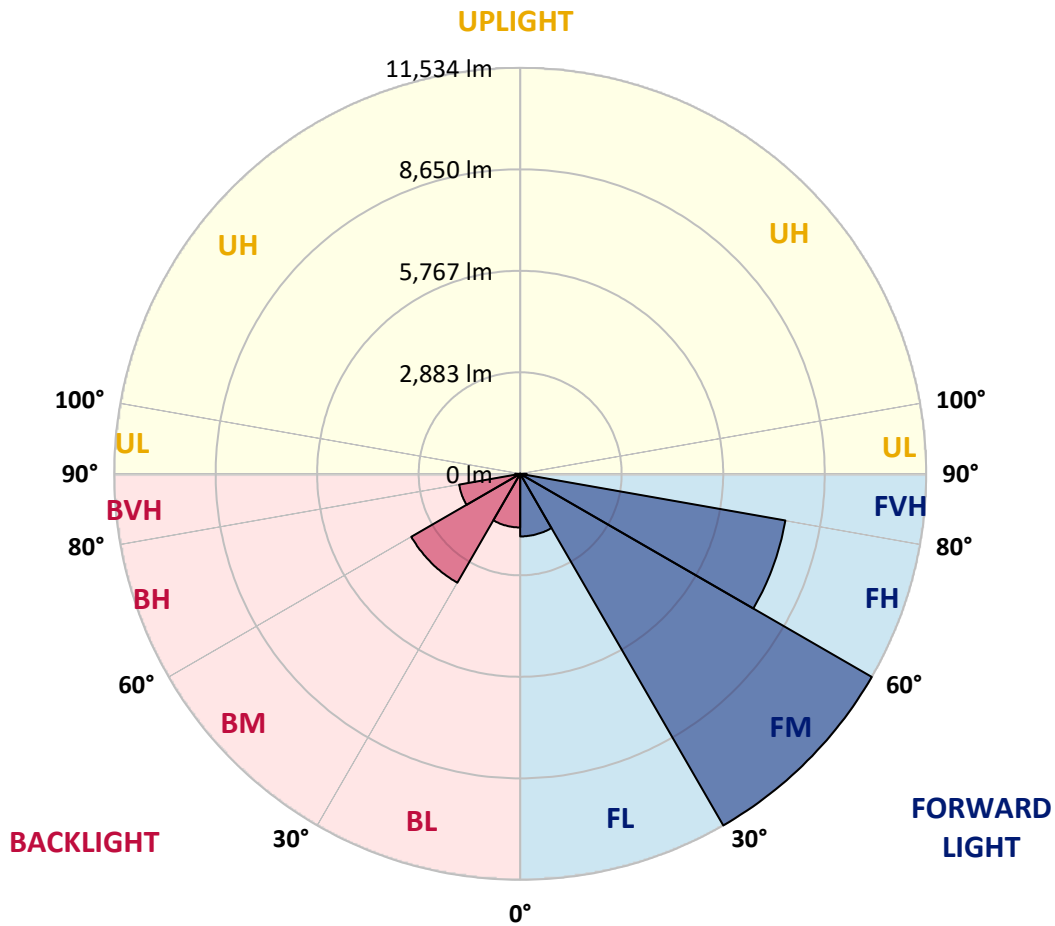
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1778.5	6.3			
FM (30°-60°)	11534.0	41.0			
FH (60°-80°)	7650.9	27.2			G4/12000
FVH (80°-90°)	184.2	0.7			G2/225
BL (0°-30°)	1524.5	5.4	B3/2500		
BM (30°-60°)	3572.1	12.7	B3/5000		
BH (60°-80°)	1761.2	6.3	B3/2500		G3/2500
BVH (80°-90°)	140.7	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°	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8
2.5°	3089.2	3107.0	3102.5	3095.1	3093.7	3096.6	3101.1	3105.5	3104.0	3111.4	3123.2
5°	3080.4	3098.1	3096.6	3096.6	3102.5	3114.4	3121.8	3129.2	3121.8	3130.6	3146.9
7.5°	3086.3	3099.6	3105.5	3111.4	3126.2	3148.4	3166.1	3182.4	3173.5	3183.9	3204.6
10°	3161.7	3172.0	3178.0	3178.0	3188.3	3213.4	3231.2	3260.8	3253.4	3269.6	3296.3
12.5°	3299.2	3309.6	3309.6	3303.7	3311.1	3327.3	3333.2	3365.8	3352.5	3379.1	3405.7
15°	3467.8	3488.5	3472.2	3461.9	3464.8	3481.1	3479.6	3504.8	3491.5	3513.6	3537.3
17.5°	3654.1	3680.8	3654.1	3652.7	3646.7	3664.5	3666.0	3688.1	3664.5	3680.8	3697.0
20°	3874.5	3911.4	3889.3	3896.7	3883.3	3890.7	3898.1	3930.7	3893.7	3905.5	3901.1
22.5°	4185.0	4229.4	4205.7	4233.8	4225.0	4219.0	4217.6	4275.2	4217.6	4222.0	4179.1
25°	4637.5	4690.8	4649.4	4687.8	4687.8	4707.0	4729.2	4803.2	4707.0	4678.9	4568.0
27.5°	5306.0	5359.2	5277.9	5301.5	5294.1	5341.5	5317.8	5501.2	5397.6	5351.8	5128.5
30°	6110.4	6205.1	6051.3	6045.4	6038.0	6113.4	6147.4	6268.7	6163.7	6117.8	5848.7
32.5°	6980.0	7079.1	6895.7	6842.4	6814.3	6860.2	6832.1	6929.7	6857.2	6786.2	6453.5
35°	7899.8	7997.4	7822.9	7719.4	7607.0	7510.9	7410.3	7435.4	7367.4	7259.5	6914.9
37.5°	8769.3	8948.3	8763.4	8652.5	8445.5	8257.7	7976.7	7859.9	7796.3	7697.2	7349.7
40°	9655.1	9757.2	9616.7	9522.0	9297.3	9003.0	8553.4	8306.5	8220.7	8124.6	7830.3
42.5°	10307.3	10404.9	10329.5	10264.4	10088.4	9746.8	9165.7	8856.6	8732.4	8624.4	8374.5
45°	10824.9	10897.3	10850.0	10873.7	10798.3	10467.0	9800.1	9446.6	9318.0	9186.4	8989.7
47.5°	11033.4	11110.3	11185.7	11326.2	11454.8	11210.8	10481.8	10085.5	9949.4	9814.8	9621.1
50°	11009.7	11088.1	11307.0	11605.7	12005.0	11923.6	11200.5	10765.7	10640.0	10486.2	10307.3
52.5°	10820.4	10909.2	11190.1	11687.0	12322.9	12457.5	11932.5	11468.2	11349.9	11166.5	10987.5
55°	10323.6	10376.8	10798.3	11502.2	12398.3	12830.1	12649.7	12216.4	12098.1	11842.3	11647.1
57.5°	9402.3	9479.2	10092.9	11003.8	12209.0	13083.0	13279.7	13003.2	12889.3	12521.1	12317.0
60°	8200.0	8322.7	9025.2	10166.8	11726.9	13081.5	13852.0	13776.6	13681.9	13189.5	12976.5
62.5°	6839.5	6981.5	7657.3	8983.8	10884.0	12710.4	14209.9	14424.3	14375.5	13806.2	13534.0
65°	5252.7	5350.3	6023.2	7453.2	9572.3	11913.3	14251.3	14866.5	14875.3	14274.9	13825.4
67.5°	3497.4	3778.4	4362.5	5592.9	7815.5	10610.4	13887.5	14938.9	15024.7	14436.1	13679.0
70°	1706.5	2076.2	2648.5	3634.9	5592.9	8612.6	12936.6	14344.4	14535.2	13965.9	12806.5
72.5°	708.3	828.1	1140.2	1793.8	3210.5	5811.7	11026.0	12732.5	13086.0	12374.7	10767.2
75°	477.7	517.6	652.2	919.8	1462.5	2865.9	7951.5	9493.9	10063.3	9346.1	7639.5
77.5°	368.2	393.4	474.7	643.3	869.5	1084.0	4256.0	5721.5	6015.8	5569.2	3975.0
80°	289.8	309.1	354.9	468.8	616.7	579.7	1450.7	2592.4	2762.4	2317.3	1277.7
82.5°	251.4	258.8	254.4	317.9	409.6	338.6	476.2	956.8	1055.9	766.0	417.0
85°	181.9	202.6	211.5	196.7	217.4	171.5	195.2	338.6	372.7	332.7	235.1
87.5°	73.9	109.4	134.6	127.2	79.9	48.8	60.6	99.1	113.9	124.2	76.9
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°	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8	3121.8
2.5°	3124.7	3135.1	3142.5	3151.3	3157.3	3166.1	3183.9	3194.2	3195.7	3203.1	3201.6
5°	3152.8	3167.6	3183.9	3207.5	3234.2	3256.3	3290.3	3314.0	3322.9	3330.3	3328.8
7.5°	3213.4	3234.2	3263.7	3305.1	3343.6	3373.2	3414.6	3442.7	3470.8	3481.1	3482.6
10°	3303.7	3333.2	3376.1	3432.3	3473.7	3512.2	3555.1	3578.7	3606.8	3618.6	3624.6
12.5°	3416.0	3447.1	3503.3	3581.7	3620.1	3646.7	3661.5	3655.6	3661.5	3671.9	3674.8
15°	3544.7	3578.7	3642.3	3726.6	3753.2	3729.6	3697.0	3667.4	3663.0	3666.0	3676.3
17.5°	3697.0	3722.2	3796.1	3867.1	3847.9	3750.3	3679.3	3632.0	3608.3	3600.9	3611.2
20°	3910.0	3910.0	3970.6	4015.0	3886.3	3720.7	3609.8	3532.9	3484.1	3463.4	3458.9
22.5°	4168.8	4145.1	4183.5	4152.5	3878.9	3637.9	3484.1	3351.0	3277.0	3247.5	3243.0
25°	4497.1	4469.0	4458.6	4266.4	3825.7	3506.3	3256.3	3095.1	3030.1	3013.8	3016.8
27.5°	4992.5	4921.5	4786.9	4328.5	3728.1	3299.2	2990.1	2840.8	2803.8	2805.3	2809.7
30°	5652.0	5510.0	5180.3	4338.8	3568.4	3006.4	2718.0	2611.6	2593.8	2601.2	2626.4
32.5°	6262.8	6128.2	5582.5	4291.5	3322.9	2719.5	2474.0	2403.1	2376.4	2385.3	2397.1
35°	6741.9	6704.9	5955.2	4225.0	3021.2	2450.4	2255.2	2194.6	2142.8	2131.0	2139.8
37.5°	7194.4	7179.6	6234.7	4131.8	2722.5	2259.6	2079.2	1999.3	1923.9	1882.5	1884.0
40°	7691.3	7676.5	6418.0	3988.3	2457.8	2094.0	1921.0	1816.0	1722.8	1647.4	1654.8
42.5°	8250.3	8163.0	6505.3	3782.8	2233.0	1953.5	1792.3	1650.3	1527.6	1458.1	1462.5
45°	8861.0	8664.3	6503.8	3521.0	2043.7	1824.8	1654.8	1453.7	1339.8	1274.7	1271.8
47.5°	9508.7	9143.5	6423.9	3231.2	1860.3	1682.9	1441.8	1288.0	1212.6	1172.7	1163.8
50°	10177.2	9591.5	6287.9	2898.5	1672.5	1521.7	1308.7	1203.7	1146.1	1109.1	1095.8
52.5°	10805.6	9998.2	6123.7	2521.4	1481.8	1364.9	1249.6	1168.3	1107.6	1066.2	1048.5
55°	11389.8	10348.7	5891.6	2135.4	1326.5	1259.9	1221.5	1153.5	1084.0	1035.2	1015.9
57.5°	11908.8	10576.4	5490.8	1773.1	1215.6	1187.5	1191.9	1128.3	1048.5	1007.1	980.4
60°	12340.7	10743.5	4897.8	1437.4	1125.4	1116.5	1146.1	1081.0	987.8	940.5	919.8
62.5°	12599.4	10740.6	4170.2	1177.1	1048.5	1051.4	1085.4	1021.9	927.2	882.8	869.5
65°	12577.3	10477.4	3371.7	1007.1	974.5	977.5	1021.9	956.8	876.9	850.3	848.8
67.5°	12132.1	9835.6	2586.4	896.2	893.2	906.5	958.3	912.4	845.9	842.9	847.4
70°	10926.9	8503.1	1863.3	807.4	808.9	828.1	896.2	884.3	829.6	835.5	834.0
72.5°	8761.9	6483.1	1251.1	714.3	715.7	746.8	837.0	862.1	813.3	891.7	903.6
75°	5835.4	4043.1	804.5	615.2	616.7	656.6	785.2	819.3	769.0	888.8	896.2
77.5°	2803.8	1817.5	582.7	517.6	517.6	554.6	678.8	733.5	655.1	690.6	632.9
80°	968.6	683.2	458.4	417.0	408.2	433.3	572.3	635.9	564.9	520.5	488.0
82.5°	381.5	354.9	368.2	323.9	294.3	310.5	445.1	525.0	415.5	375.6	374.1
85°	218.9	230.7	260.3	214.4	170.1	190.8	326.8	377.1	313.5	276.5	282.5
87.5°	59.2	81.3	119.8	110.9	76.9	81.3	155.3	208.5	180.4	139.0	143.4
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)