

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: P883937

Luminaire Tested: **NAV-SB4C-735-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30073 lumens
Efficiency: N/A
Efficacy: 149.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

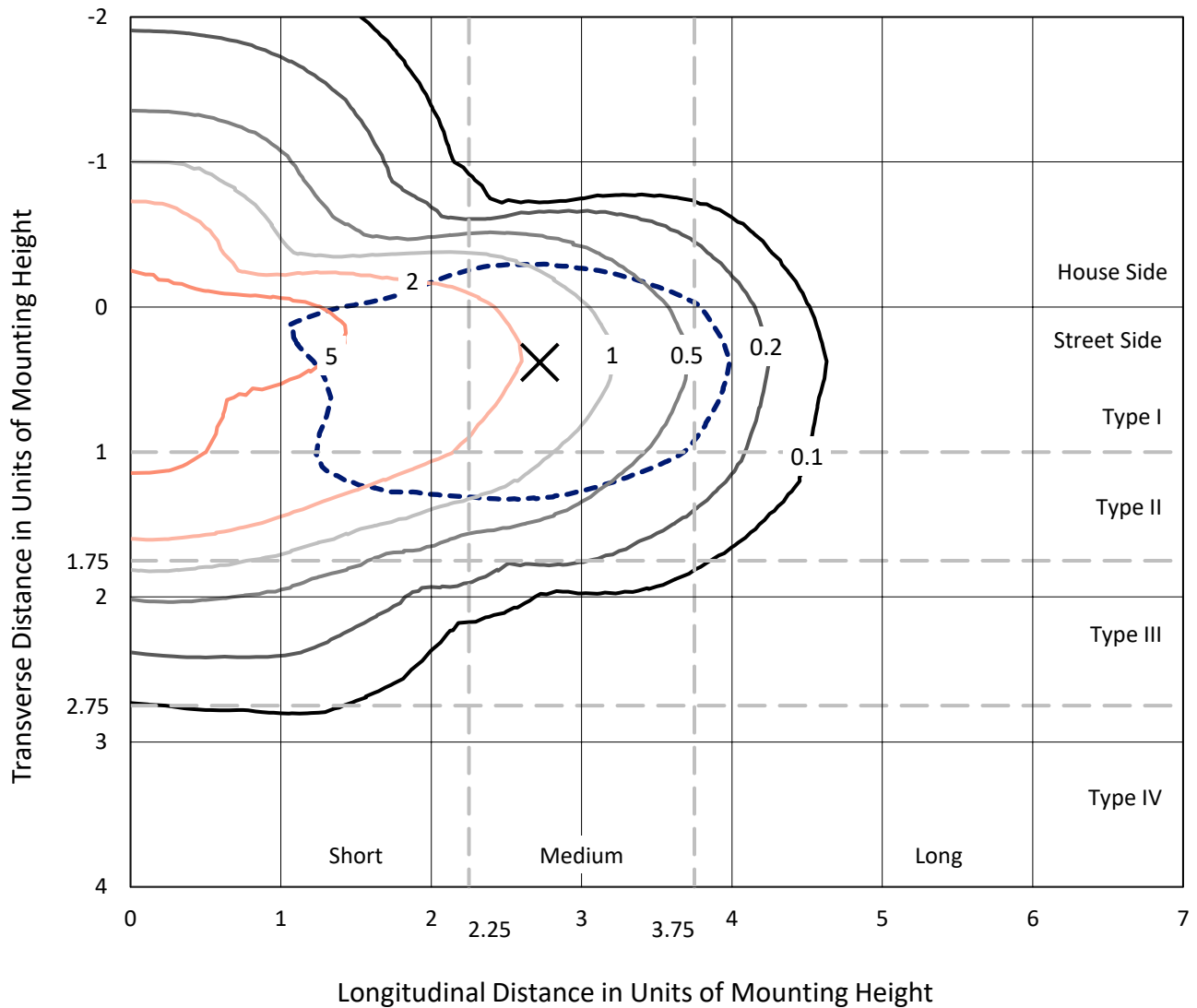
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

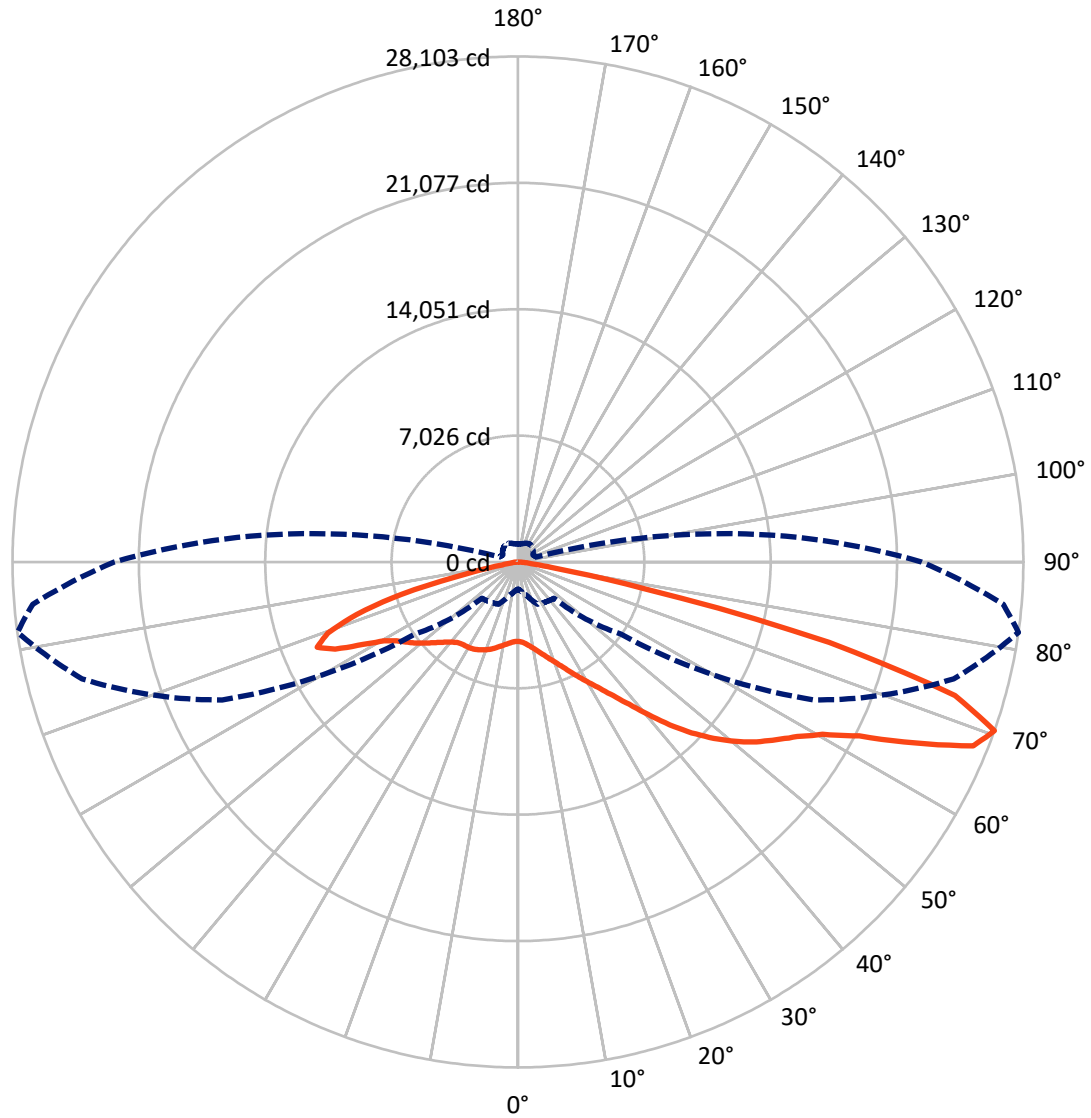
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7413.7	0.0	7413.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	22659.3	0.0	22659.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	30073.0	0.0	30073.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	416.3	1.4
10°-20°	1196.0	4.0
20°-30°	2000.9	6.7
30°-40°	3125.9	10.4
40°-50°	4978.3	16.6
50°-60°	6927.9	23.0
60°-70°	7246.9	24.1
70°-80°	3787.6	12.6
80°-90°	393.3	1.3
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°	30073.0	100.0
0°-180°	30073.0	100.0

Coefficient of Utilization

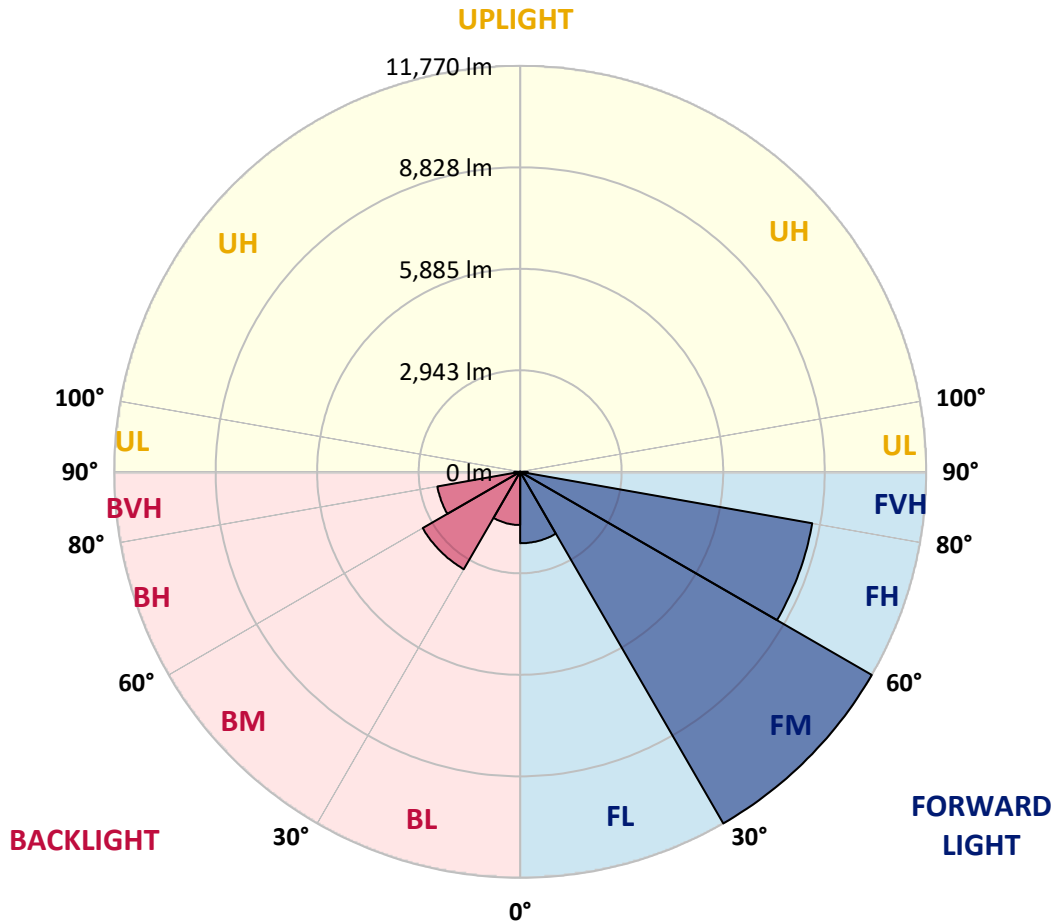


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2070.9	6.9			
FM (30°-60°)	11770.3	39.1			
FH (60°-80°)	8598.0	28.6			G4/12000
FVH (80°-90°)	220.2	0.7			G2/225
BL (0°-30°)	1542.3	5.1	B3/2500		
BM (30°-60°)	3261.7	10.8	B3/5000		
BH (60°-80°)	2436.5	8.1	B3/2500		G3/2500
BVH (80°-90°)	173.1	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1
2.5°	4514.4	4539.9	4532.0	4524.0	4524.0	4512.8	4511.2	4495.2	4482.5	4461.7	4457.0
5°	4571.8	4599.0	4595.8	4602.2	4622.9	4627.7	4632.5	4622.9	4597.4	4571.8	4560.7
7.5°	4520.8	4551.1	4560.7	4599.0	4662.8	4720.3	4763.3	4780.9	4757.0	4720.3	4702.7
10°	4348.4	4381.9	4415.5	4506.4	4619.7	4755.4	4870.3	4938.9	4934.1	4899.0	4868.7
12.5°	3999.0	4034.1	4105.9	4283.0	4490.5	4729.8	4943.7	5087.3	5136.7	5111.2	5058.6
15°	3719.7	3750.0	3804.3	3986.2	4255.9	4619.7	4970.8	5250.0	5376.1	5361.7	5297.9
17.5°	3711.7	3724.5	3758.0	3844.2	4051.6	4447.4	4942.1	5409.6	5650.6	5649.0	5569.2
20°	3852.2	3856.9	3876.1	3893.6	4011.7	4316.5	4868.7	5542.1	5958.6	5958.6	5872.4
22.5°	4046.8	4043.6	4062.8	4046.8	4104.3	4305.4	4822.4	5658.6	6301.6	6327.2	6218.7
25°	4338.9	4322.9	4318.1	4281.4	4292.6	4409.1	4873.4	5791.0	6708.6	6761.2	6625.6
27.5°	4728.2	4702.7	4685.1	4600.6	4571.8	4622.9	5029.8	5950.6	7161.8	7252.7	7080.4
30°	5235.7	5189.4	5163.9	5017.1	4913.3	4921.3	5266.0	6162.8	7635.7	7782.5	7563.9
32.5°	5928.2	5856.4	5787.8	5546.9	5357.0	5294.7	5570.8	6456.4	8149.5	8384.1	8103.3
35°	6703.8	6646.3	6572.9	6201.1	5909.1	5765.5	5982.5	6866.5	8751.1	9122.9	8757.5
37.5°	7450.6	7401.1	7436.2	6935.2	6558.6	6349.5	6521.9	7417.1	9493.2	10042.1	9577.7
40°	8222.9	8184.6	8189.4	7710.7	7271.9	7037.3	7176.1	8108.0	10343.7	11135.2	10563.9
42.5°	9062.3	9033.6	8937.8	8513.4	8020.3	7801.7	7929.3	8905.9	11256.5	12379.9	11645.8
45°	10002.2	9984.7	9895.3	9408.6	8843.7	8597.9	8770.3	9786.8	12174.0	13551.2	12732.5
47.5°	10814.4	10828.8	10817.6	10407.5	9821.9	9461.2	9667.1	10705.9	13027.8	14652.2	13774.6
50°	11205.4	11280.4	11390.5	11262.9	10899.0	10532.0	10571.9	11593.2	13841.6	15684.7	14773.5
52.5°	11001.2	11143.2	11443.2	11647.4	11787.9	11711.3	11604.3	12474.0	14607.6	16616.6	15718.2
55°	10240.0	10439.4	10937.3	11430.4	12146.9	12703.8	12844.3	13450.6	15354.4	17436.8	16611.8
57.5°	8853.3	9177.2	9624.0	10621.4	11827.8	13184.1	14290.0	14805.4	16145.9	18312.9	17546.9
60°	6475.6	6909.6	7465.0	8949.0	10710.7	12927.2	15520.3	16886.3	17270.9	19447.5	18764.5
62.5°	4144.2	4412.3	4922.9	6320.8	8345.8	11610.7	15896.9	19487.4	19177.8	21308.1	20590.1
65°	2837.3	3009.6	3477.2	4262.3	5395.3	8642.6	14888.4	21437.4	22206.6	24257.1	23711.4
67.5°	2061.7	2192.6	2591.5	3279.3	3515.5	5114.4	11553.3	21348.0	25150.7	27295.4	26446.5
70°	1503.2	1595.8	1930.9	2591.5	2704.8	2845.2	6999.0	18147.0	25086.9	28102.9	27086.4
72.5°	1113.8	1177.7	1402.7	2010.7	2189.4	1921.3	3464.4	13188.9	21557.1	25418.8	24603.4
75°	805.9	853.7	1019.7	1538.3	1752.1	1463.3	1728.2	7707.5	15036.8	17880.5	18024.1
77.5°	616.0	652.7	761.2	1126.6	1402.7	1097.9	1072.3	3545.8	7129.8	7165.0	7567.1
80°	494.7	518.6	577.7	793.1	1075.5	821.8	698.9	1431.4	2253.2	1906.9	2001.1
82.5°	363.8	403.7	488.3	556.9	769.2	566.5	426.1	722.9	856.9	737.2	743.6
85°	207.4	234.6	295.2	398.9	491.5	346.3	244.2	320.7	398.9	327.1	292.0
87.5°	73.4	95.7	103.7	156.4	213.8	143.6	94.1	92.6	130.9	97.3	81.4
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°	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1	4409.1
2.5°	4441.0	4433.0	4401.1	4358.0	4313.3	4270.2	4255.9	4225.6	4204.8	4193.7	4206.4
5°	4530.4	4504.8	4429.8	4334.1	4233.5	4125.0	4048.4	3978.2	3927.2	3879.3	3898.4
7.5°	4658.0	4613.3	4484.1	4316.5	4137.8	3957.5	3823.4	3721.3	3652.7	3608.0	3617.6
10°	4806.4	4737.8	4539.9	4289.4	4013.3	3754.8	3596.8	3509.1	3466.0	3442.0	3448.4
12.5°	4977.2	4879.8	4597.4	4227.2	3823.4	3528.2	3419.7	3394.2	3395.8	3397.4	3400.6
15°	5187.8	5052.2	4643.7	4091.5	3576.1	3354.3	3335.1	3376.6	3419.7	3440.5	3438.9
17.5°	5425.6	5234.1	4651.6	3868.1	3333.5	3242.6	3303.2	3392.6	3458.0	3486.7	3493.1
20°	5680.9	5419.2	4594.2	3552.2	3134.1	3151.6	3260.1	3375.0	3446.8	3483.5	3493.1
22.5°	5972.9	5617.1	4457.0	3220.2	2971.3	3052.7	3180.3	3292.0	3367.0	3403.8	3413.3
25°	6306.4	5838.9	4241.5	2941.0	2830.9	2941.0	3068.6	3161.2	3221.8	3255.3	3264.9
27.5°	6676.6	6070.3	3954.3	2719.2	2708.0	2826.1	2931.4	3003.2	3035.1	3060.7	3070.2
30°	7048.5	6280.9	3606.4	2551.6	2601.1	2712.8	2787.8	2819.7	2829.3	2834.1	2845.2
32.5°	7450.6	6462.8	3241.0	2412.8	2499.0	2602.7	2647.4	2661.7	2617.0	2586.7	2596.3
35°	7937.3	6657.5	2883.5	2302.7	2398.4	2487.8	2502.1	2489.4	2436.7	2374.5	2377.7
37.5°	8538.9	6900.1	2597.9	2224.5	2304.3	2363.3	2345.8	2342.6	2347.4	2274.0	2278.7
40°	9276.1	7216.0	2388.8	2163.8	2227.7	2240.4	2191.0	2218.1	2242.0	2130.3	2133.5
42.5°	10094.8	7597.4	2256.4	2122.4	2163.8	2133.5	2056.9	2087.3	2084.1	1937.2	1935.7
45°	10929.3	8012.3	2210.1	2092.0	2104.8	2044.2	1959.6	1967.6	1900.5	1768.1	1772.9
47.5°	11759.1	8457.5	2238.8	2066.5	2031.4	1962.8	1897.4	1862.2	1763.3	1664.4	1664.4
50°	12573.0	8925.1	2344.2	2015.4	1930.9	1891.0	1843.1	1780.9	1675.5	1591.0	1584.6
52.5°	13327.8	9395.8	2462.3	1930.9	1804.8	1828.7	1798.4	1726.6	1622.9	1536.7	1538.3
55°	14042.7	9866.6	2508.5	1814.4	1686.7	1774.5	1756.9	1624.5	1500.0	1429.8	1423.4
57.5°	14821.4	10433.1	2457.5	1666.0	1591.0	1712.2	1645.2	1498.4	1426.6	1373.9	1369.2
60°	15900.1	11321.9	2347.4	1482.5	1500.0	1619.7	1504.8	1444.2	1366.0	1306.9	1303.7
62.5°	17692.2	12979.9	2170.2	1300.5	1393.1	1482.5	1437.8	1377.1	1297.4	1239.9	1239.9
65°	20341.1	15284.2	1836.7	1158.5	1273.4	1348.4	1366.0	1305.3	1222.4	1161.7	1164.9
67.5°	22575.2	16729.9	1389.9	1040.4	1150.5	1239.9	1289.4	1230.3	1142.6	1083.5	1085.1
70°	22452.3	15679.9	1061.2	923.9	1042.0	1133.0	1196.8	1150.5	1056.4	1000.5	1005.3
72.5°	19942.2	13117.1	858.5	805.9	931.9	1021.3	1097.9	1062.8	967.0	912.8	912.8
75°	14650.6	9311.2	686.2	686.2	794.7	904.8	989.4	967.0	879.3	841.0	829.8
77.5°	6175.6	3906.4	537.8	569.7	660.6	777.1	882.5	890.4	813.8	861.7	781.9
80°	1642.0	1077.1	410.1	448.4	518.6	641.5	767.6	764.4	681.4	636.7	592.0
82.5°	625.5	424.5	292.0	316.0	375.0	491.5	608.0	627.1	544.2	470.7	470.7
85°	241.0	181.9	180.3	189.9	218.6	325.5	459.6	475.5	410.1	347.9	359.0
87.5°	62.2	54.3	67.0	63.8	100.5	173.9	263.3	272.9	250.5	145.2	207.4
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)