

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: P883407

Luminaire Tested: **NAV-SB3D-727-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883407
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-SB3D-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27408 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

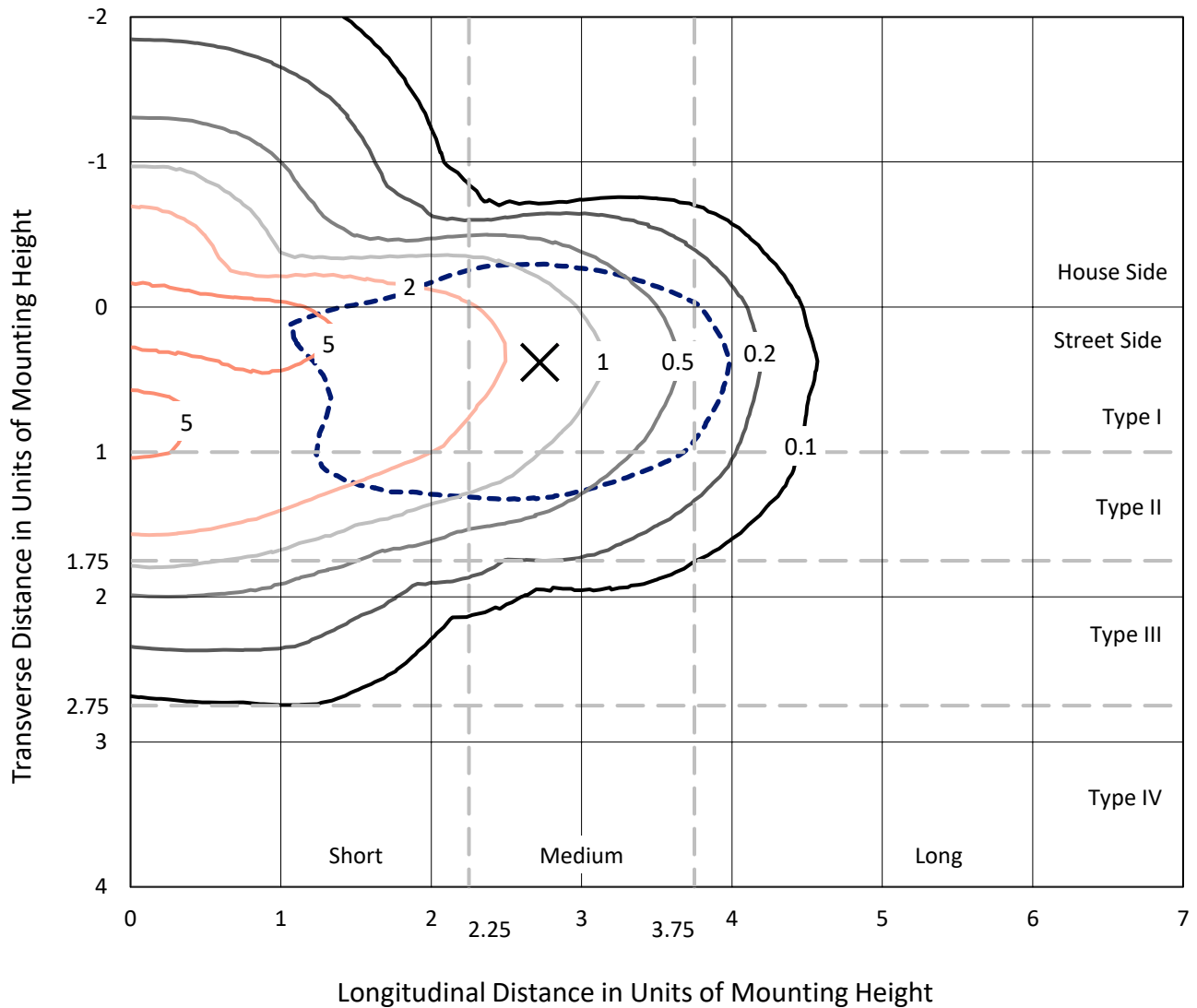
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

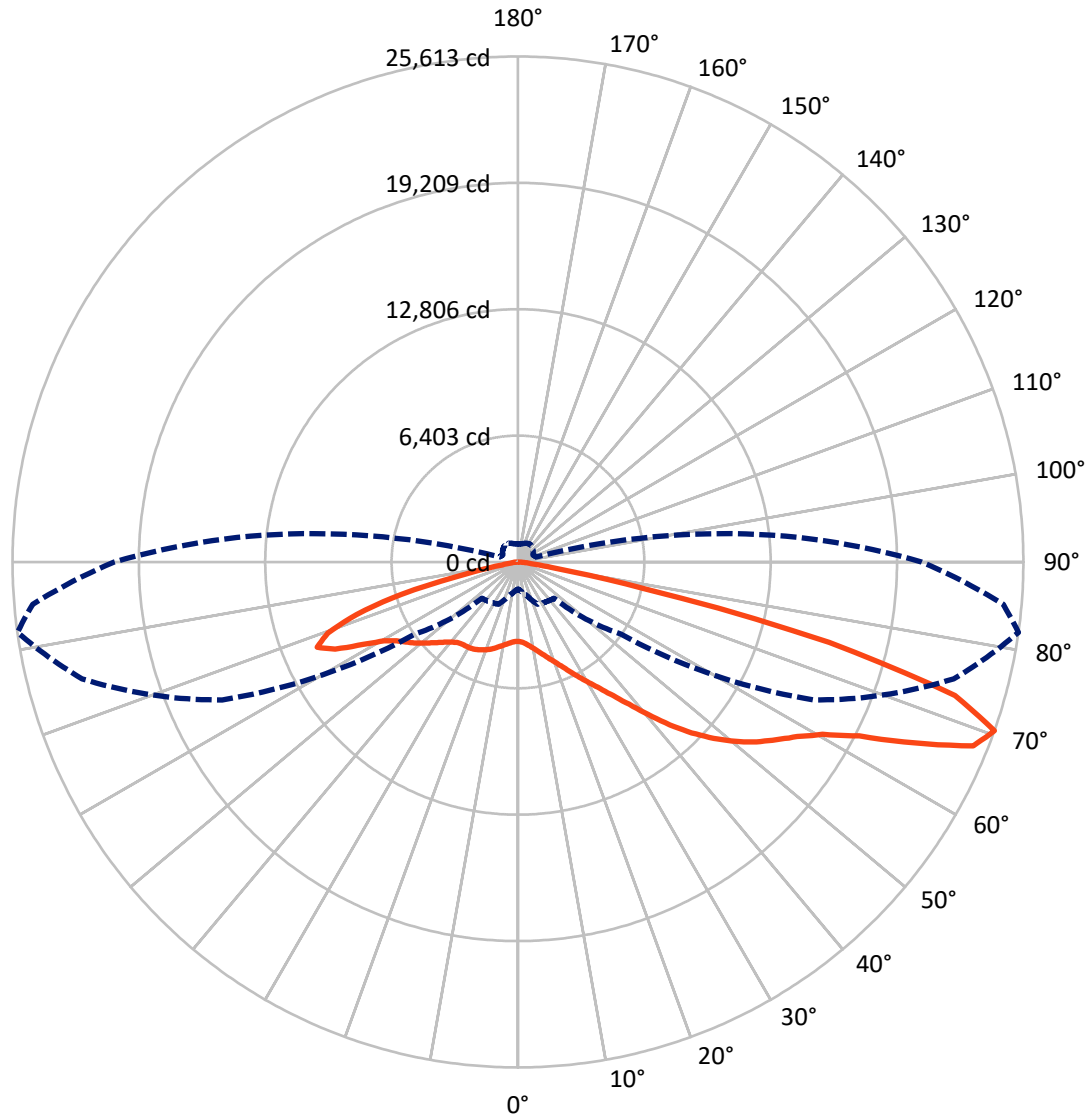
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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	6756.7	0.0	6756.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	20651.3	0.0	20651.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	27408.0	0.0	27408.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.4	1.4
10°-20°	1090.0	4.0
20°-30°	1823.5	6.7
30°-40°	2848.8	10.4
40°-50°	4537.1	16.6
50°-60°	6314.0	23.0
60°-70°	6604.7	24.1
70°-80°	3452.0	12.6
80°-90°	358.4	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°	27408.0	100.0
0°-180°	27408.0	100.0

Coefficient of Utilization

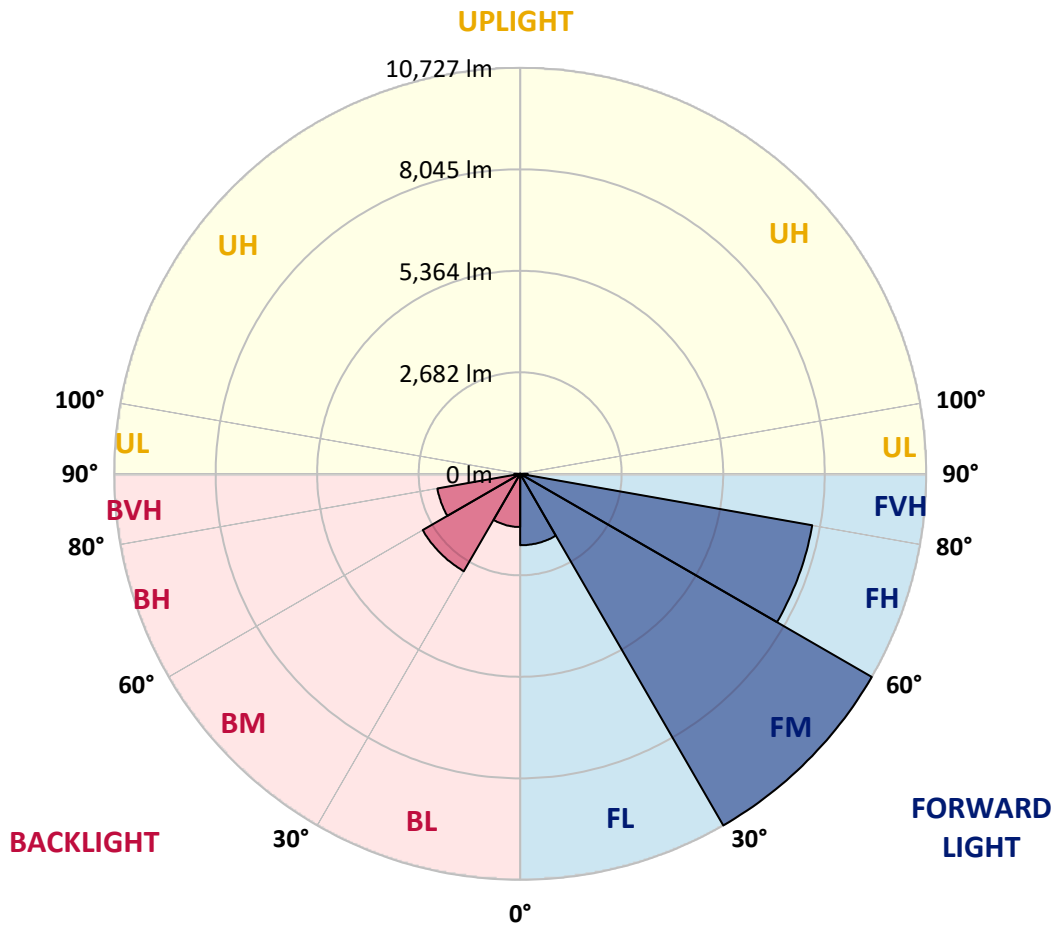


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1887.3	6.9			
FM (30°-60°)	10727.2	39.1			
FH (60°-80°)	7836.0	28.6			G4/12000
FVH (80°-90°)	200.7	0.7			G2/225
BL (0°-30°)	1405.7	5.1	B3/2500		
BM (30°-60°)	2972.7	10.8	B3/5000		
BH (60°-80°)	2220.6	8.1	B3/2500		G3/2500
BVH (80°-90°)	157.8	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°	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4
2.5°	4114.3	4137.6	4130.3	4123.1	4123.1	4112.9	4111.4	4096.9	4085.3	4066.3	4062.0
5°	4166.7	4191.4	4188.5	4194.3	4213.2	4217.6	4222.0	4213.2	4190.0	4166.7	4156.5
7.5°	4120.2	4147.8	4156.5	4191.4	4249.6	4302.0	4341.2	4357.2	4335.4	4302.0	4286.0
10°	3963.1	3993.6	4024.2	4107.1	4210.3	4333.9	4438.7	4501.2	4496.8	4464.8	4437.2
12.5°	3644.6	3676.6	3742.0	3903.5	4092.5	4310.7	4505.6	4636.5	4681.5	4658.3	4610.3
15°	3390.1	3417.7	3467.2	3633.0	3878.7	4210.3	4530.3	4784.8	4899.7	4886.6	4828.4
17.5°	3382.8	3394.4	3425.0	3503.5	3692.6	4053.3	4504.1	4930.2	5149.8	5148.4	5075.7
20°	3510.8	3515.2	3532.6	3548.6	3656.2	3934.0	4437.2	5050.9	5430.5	5430.5	5352.0
22.5°	3688.2	3685.3	3702.8	3688.2	3740.6	3923.8	4395.0	5157.1	5743.2	5766.5	5667.6
25°	3954.4	3939.8	3935.5	3902.0	3912.2	4018.4	4441.6	5277.8	6114.1	6162.1	6038.4
27.5°	4309.2	4286.0	4270.0	4192.9	4166.7	4213.2	4584.1	5423.3	6527.1	6610.0	6452.9
30°	4771.7	4729.5	4706.3	4572.5	4477.9	4485.2	4799.3	5616.7	6959.0	7092.8	6893.6
32.5°	5402.9	5337.4	5274.9	5055.3	4882.2	4825.5	5077.1	5884.3	7427.3	7641.1	7385.2
35°	6109.7	6057.3	5990.4	5651.6	5385.4	5254.5	5452.3	6258.0	7975.6	8314.5	7981.4
37.5°	6790.3	6745.3	6777.2	6320.6	5977.4	5786.8	5943.9	6759.8	8651.9	9152.2	8729.0
40°	7494.2	7459.3	7463.7	7027.4	6627.5	6413.7	6540.2	7389.5	9427.1	10148.4	9627.8
42.5°	8259.2	8233.0	8145.8	7758.9	7309.5	7110.3	7226.6	8116.7	10259.0	11282.8	10613.8
45°	9115.8	9099.8	9018.4	8574.8	8060.0	7836.0	7993.1	8919.5	11095.2	12350.3	11604.2
47.5°	9856.1	9869.2	9859.0	9485.2	8951.5	8622.8	8810.4	9757.2	11873.3	13353.8	12553.9
50°	10212.4	10280.8	10381.1	10264.8	9933.2	9598.7	9635.0	10565.8	12615.0	14294.8	13464.3
52.5°	10026.3	10155.7	10429.1	10615.3	10743.2	10673.4	10576.0	11368.6	13313.1	15144.1	14325.3
55°	9332.5	9514.3	9968.1	10417.5	11070.5	11578.0	11706.0	12258.7	13993.7	15891.6	15139.7
57.5°	8068.7	8363.9	8771.2	9680.1	10779.6	12015.8	13023.7	13493.4	14715.1	16690.1	15992.0
60°	5901.7	6297.3	6803.4	8156.0	9761.6	11781.6	14145.0	15389.9	15740.4	17724.1	17101.6
62.5°	3776.9	4021.3	4486.7	5760.7	7606.2	10581.8	14488.2	17760.5	17478.3	19419.9	18765.4
65°	2585.8	2742.9	3169.0	3884.6	4917.1	7876.7	13569.0	19537.7	20238.7	22107.5	21610.1
67.5°	1879.0	1998.3	2361.9	2988.7	3203.9	4661.2	10529.5	19456.2	22921.9	24876.6	24102.9
70°	1370.0	1454.3	1759.8	2361.9	2465.1	2593.1	6378.8	16538.8	22863.8	25612.5	24686.1
72.5°	1015.1	1073.3	1278.4	1832.5	1995.4	1751.0	3157.4	12020.2	19646.7	23166.3	22423.1
75°	734.4	778.1	929.3	1402.0	1596.9	1333.6	1575.1	7024.5	13704.3	16295.9	16426.8
77.5°	561.4	594.8	693.7	1026.8	1278.4	1000.6	977.3	3231.6	6498.0	6530.0	6896.5
80°	450.8	472.7	526.5	722.8	980.2	749.0	637.0	1304.5	2053.5	1737.9	1823.7
82.5°	331.6	367.9	445.0	507.6	701.0	516.3	388.3	658.8	781.0	671.9	677.7
85°	189.1	213.8	269.1	363.6	447.9	315.6	222.5	292.3	363.6	298.1	266.1
87.5°	66.9	87.3	94.5	142.5	194.9	130.9	85.8	84.4	119.3	88.7	74.2
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°	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4	4018.4
2.5°	4047.4	4040.2	4011.1	3971.8	3931.1	3891.8	3878.7	3851.1	3832.2	3822.0	3833.7
5°	4128.9	4105.6	4037.3	3950.0	3858.4	3759.5	3689.7	3625.7	3579.1	3535.5	3553.0
7.5°	4245.2	4204.5	4086.7	3934.0	3771.1	3606.8	3484.6	3391.5	3329.0	3288.3	3297.0
10°	4380.5	4318.0	4137.6	3909.3	3657.7	3422.1	3278.1	3198.1	3158.8	3137.0	3142.8
12.5°	4536.1	4447.4	4190.0	3852.6	3484.6	3215.6	3116.7	3093.4	3094.8	3096.3	3099.2
15°	4728.1	4604.5	4232.1	3728.9	3259.2	3057.0	3039.6	3077.4	3116.7	3135.6	3134.1
17.5°	4944.8	4770.3	4239.4	3525.3	3038.1	2955.2	3010.5	3091.9	3151.6	3177.7	3183.6
20°	5177.5	4939.0	4187.1	3237.4	2856.3	2872.3	2971.2	3075.9	3141.4	3174.8	3183.6
22.5°	5443.6	5119.3	4062.0	2934.9	2708.0	2782.2	2898.5	3000.3	3068.7	3102.1	3110.8
25°	5747.6	5321.4	3865.6	2680.4	2580.0	2680.4	2796.7	2881.1	2936.3	2966.9	2975.6
27.5°	6085.0	5532.3	3603.9	2478.2	2468.0	2575.6	2671.6	2737.1	2766.2	2789.4	2798.2
30°	6423.8	5724.3	3286.8	2325.5	2370.6	2472.4	2540.7	2569.8	2578.6	2582.9	2593.1
32.5°	6790.3	5890.1	2953.8	2199.0	2277.5	2372.0	2412.8	2425.8	2385.1	2357.5	2366.2
35°	7233.9	6067.5	2628.0	2098.6	2185.9	2267.3	2280.4	2268.8	2220.8	2164.1	2167.0
37.5°	7782.2	6288.6	2367.7	2027.4	2100.1	2153.9	2137.9	2135.0	2139.3	2072.4	2076.8
40°	8454.1	6576.5	2177.2	1972.1	2030.3	2041.9	1996.8	2021.5	2043.4	1941.6	1944.5
42.5°	9200.2	6924.1	2056.4	1934.3	1972.1	1944.5	1874.7	1902.3	1899.4	1765.6	1764.1
45°	9960.8	7302.3	2014.3	1906.6	1918.3	1863.0	1785.9	1793.2	1732.1	1611.4	1615.8
47.5°	10717.1	7708.0	2040.4	1883.4	1851.4	1788.8	1729.2	1697.2	1607.1	1516.9	1516.9
50°	11458.8	8134.2	2136.4	1836.8	1759.8	1723.4	1679.8	1623.0	1527.1	1450.0	1444.2
52.5°	12146.7	8563.2	2244.1	1759.8	1644.9	1666.7	1639.0	1573.6	1479.1	1400.5	1402.0
55°	12798.2	8992.2	2286.2	1653.6	1537.2	1617.2	1601.2	1480.5	1367.1	1303.1	1297.3
57.5°	13508.0	9508.5	2239.7	1518.3	1450.0	1560.5	1499.4	1365.6	1300.2	1252.2	1247.8
60°	14491.1	10318.6	2139.3	1351.1	1367.1	1476.2	1371.4	1316.2	1244.9	1191.1	1188.2
62.5°	16124.3	11829.6	1977.9	1185.3	1269.6	1351.1	1310.4	1255.1	1182.4	1130.0	1130.0
65°	18538.5	13929.7	1674.0	1055.9	1160.6	1228.9	1244.9	1189.7	1114.0	1058.8	1061.7
67.5°	20574.6	15247.4	1266.7	948.2	1048.6	1130.0	1175.1	1121.3	1041.3	987.5	989.0
70°	20462.6	14290.4	967.1	842.1	949.7	1032.6	1090.8	1048.6	962.8	911.9	916.2
72.5°	18175.0	11954.7	782.4	734.4	849.3	930.8	1000.6	968.6	881.3	831.9	831.9
75°	13352.3	8486.1	625.4	625.4	724.3	824.6	901.7	881.3	801.3	766.4	756.3
77.5°	5628.3	3560.2	490.1	519.2	602.1	708.3	804.3	811.5	741.7	785.3	712.6
80°	1496.5	981.7	373.8	408.7	472.7	584.6	699.5	696.6	621.0	580.3	539.6
82.5°	570.1	386.9	266.1	288.0	341.8	447.9	554.1	571.6	495.9	429.0	429.0
85°	219.6	165.8	164.3	173.1	199.2	296.7	418.9	433.4	373.8	317.0	327.2
87.5°	56.7	49.4	61.1	58.2	91.6	158.5	240.0	248.7	228.3	132.3	189.1
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)