

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: P884089

Luminaire Tested: **NAV-SB4D-727-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884089
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-SB4D-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37399 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

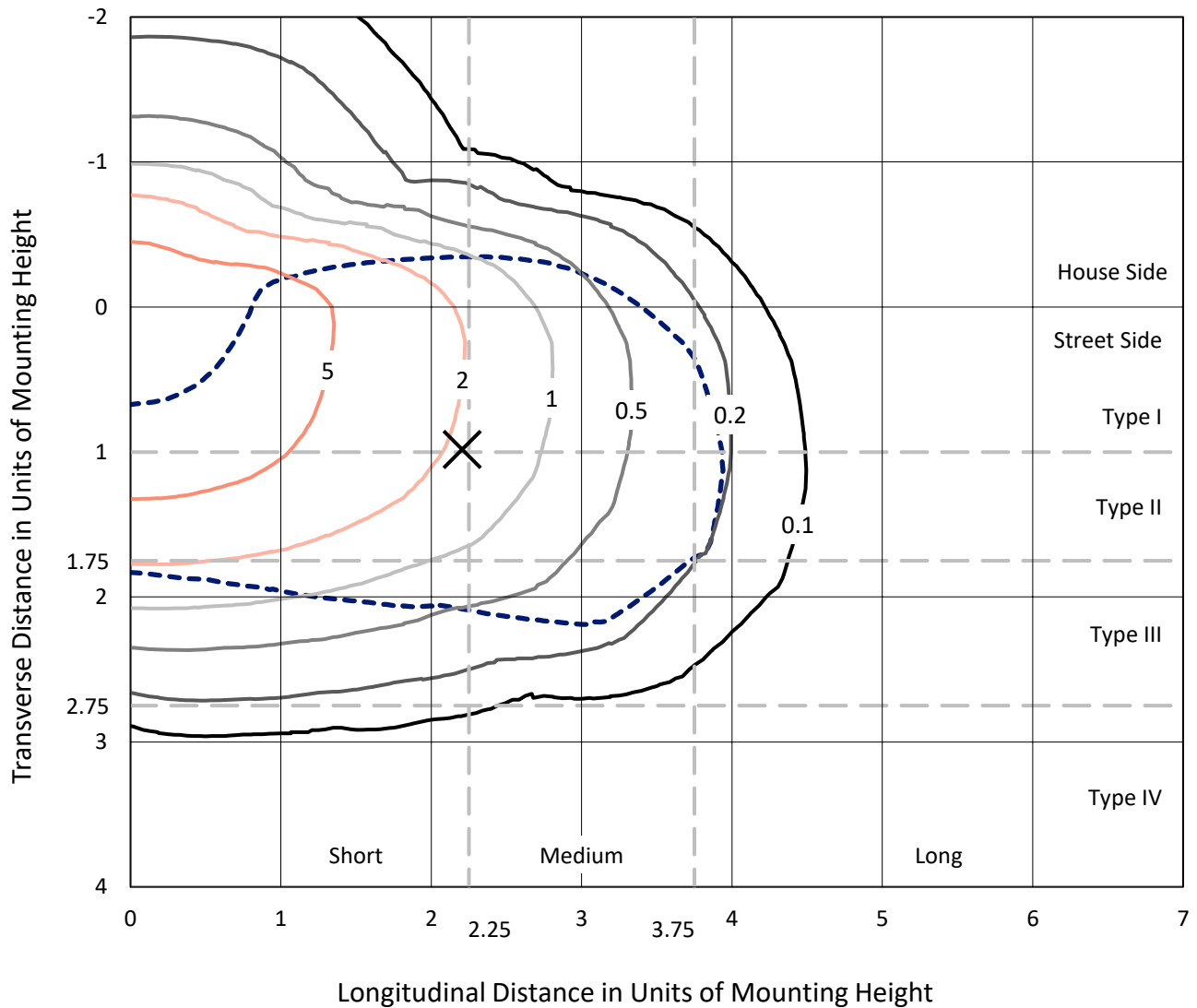
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884089
 CATALOG NUMBER: NAV-SB4D-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

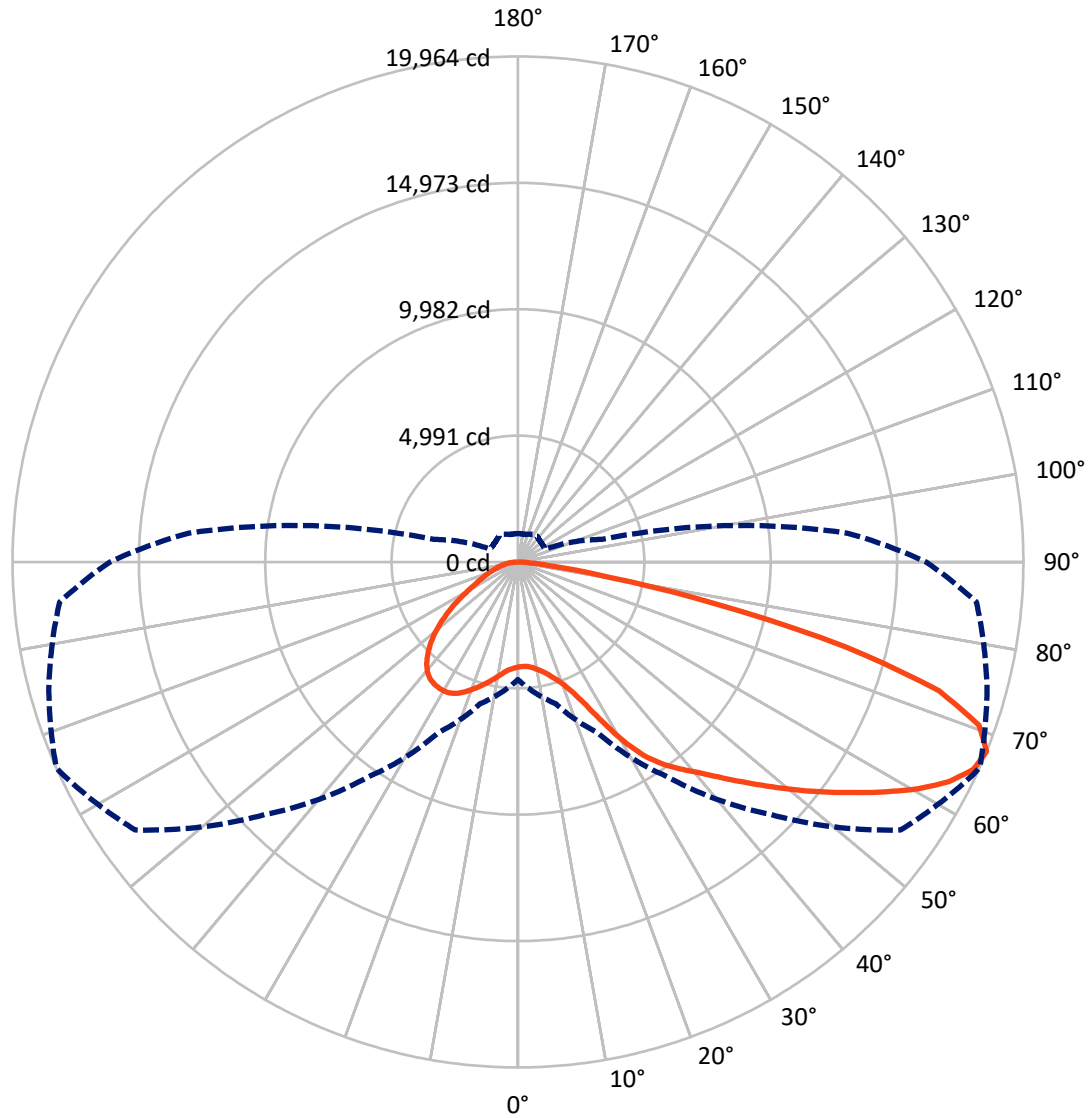
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type III - Short - N/A

REPORT NUMBER: P884089
CATALOG NUMBER: NAV-SB4D-727-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P884089
 CATALOG NUMBER: NAV-SB4D-727-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9299.2	0.0	9299.2
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	28099.9	0.0	28099.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	37399.0	0.0	37399.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	411.3	1.1
10°-20°	1358.8	3.6
20°-30°	2618.9	7.0
30°-40°	4591.9	12.3
40°-50°	6826.7	18.3
50°-60°	8653.5	23.1
60°-70°	8467.3	22.6
70°-80°	4039.0	10.8
80°-90°	431.7	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°	37399.0	100.0
0°-180°	37399.0	100.0

Coefficient of Utilization



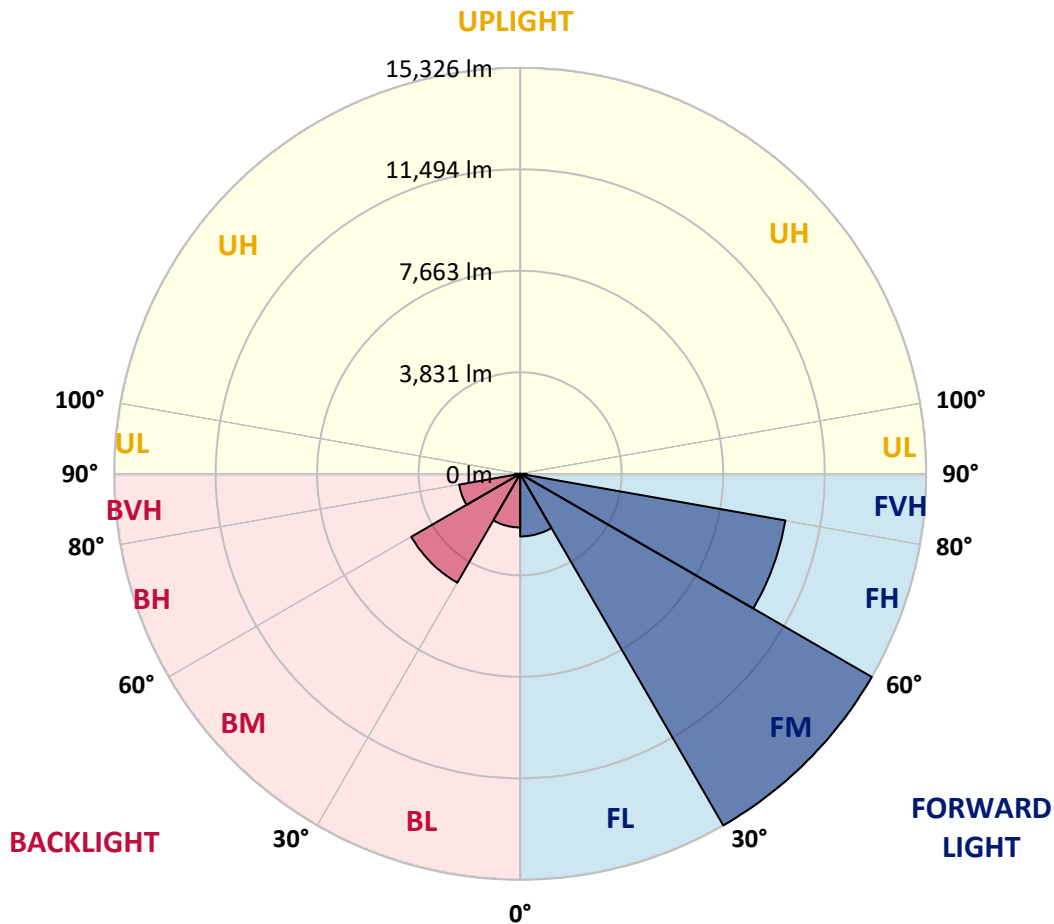
REPORT NUMBER: P884089
 CATALOG NUMBER: NAV-SB4D-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2363.2	6.3			
FM (30°-60°)	15325.8	41.0			
FH (60°-80°)	10166.1	27.2			G4/12000
FVH (80°-90°)	244.7	0.7			G3/500
BL (0°-30°)	2025.7	5.4	B3/2500		
BM (30°-60°)	4746.4	12.7	B3/5000		
BH (60°-80°)	2340.1	6.3	B3/2500		G3/2500
BVH (80°-90°)	186.9	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



REPORT NUMBER: P884089
 CATALOG NUMBER: NAV-SB4D-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0
2.5°	4104.8	4128.4	4122.5	4112.7	4110.7	4114.6	4120.5	4126.4	4124.5	4134.3	4150.0
5°	4093.0	4116.6	4114.6	4114.6	4122.5	4138.2	4148.0	4157.9	4148.0	4159.8	4181.4
7.5°	4100.9	4118.6	4126.4	4134.3	4153.9	4183.4	4207.0	4228.6	4216.8	4230.6	4258.1
10°	4201.1	4214.9	4222.7	4222.7	4236.5	4269.9	4293.5	4332.8	4322.9	4344.5	4379.9
12.5°	4383.8	4397.6	4397.6	4389.7	4399.6	4421.2	4429.0	4472.3	4454.6	4489.9	4525.3
15°	4607.8	4635.4	4613.7	4600.0	4603.9	4625.5	4623.6	4657.0	4639.3	4668.8	4700.2
17.5°	4855.4	4890.8	4855.4	4853.5	4845.6	4869.2	4871.2	4900.6	4869.2	4890.8	4912.4
20°	5148.2	5197.3	5167.9	5177.7	5160.0	5169.8	5179.7	5222.9	5173.8	5189.5	5183.6
22.5°	5560.9	5619.8	5588.4	5625.7	5613.9	5606.0	5604.1	5680.7	5604.1	5610.0	5553.0
25°	6162.1	6232.9	6177.9	6228.9	6228.9	6254.5	6284.0	6382.2	6254.5	6217.2	6069.8
27.5°	7050.3	7121.0	7013.0	7044.4	7034.6	7097.5	7066.0	7309.7	7172.1	7111.2	6814.5
30°	8119.2	8245.0	8040.6	8032.8	8023.0	8123.2	8168.4	8329.5	8190.0	8129.1	7771.4
32.5°	9274.6	9406.3	9162.6	9091.9	9054.6	9115.5	9078.1	9207.8	9111.5	9017.2	8575.1
35°	10496.8	10626.5	10394.7	10257.1	10107.8	9980.1	9846.4	9879.8	9789.5	9646.0	9188.2
37.5°	11652.2	11890.0	11644.4	11497.0	11221.9	10972.4	10599.0	10443.8	10359.3	10227.6	9765.9
40°	12829.3	12964.8	12778.2	12652.4	12353.7	11962.7	11365.4	11037.2	10923.2	10795.5	10404.5
42.5°	13695.8	13825.5	13725.3	13638.8	13405.0	12951.1	12178.9	11768.2	11603.1	11459.7	11127.6
45°	14383.6	14479.8	14417.0	14448.4	14348.2	13908.0	13021.8	12552.2	12381.3	12206.4	11945.0
47.5°	14660.6	14762.8	14863.0	15049.7	15220.6	14896.4	13927.7	13401.1	13220.3	13041.5	12784.1
50°	14629.2	14733.3	15024.1	15421.1	15951.6	15843.5	14882.7	14305.0	14137.9	13933.6	13695.8
52.5°	14377.7	14495.6	14868.9	15529.1	16374.1	16552.9	15855.3	15238.3	15081.1	14837.5	14599.7
55°	13717.4	13788.2	14348.2	15283.5	16474.3	17048.0	16808.3	16232.6	16075.4	15735.4	15476.1
57.5°	12493.3	12595.4	13410.9	14621.3	16222.8	17384.1	17645.4	17277.9	17126.6	16637.4	16366.2
60°	10895.7	11058.8	11992.2	13509.1	15582.2	17382.1	18405.8	18305.6	18179.9	17525.5	17242.6
62.5°	9088.0	9276.6	10174.6	11937.2	14462.2	16888.9	18881.4	19166.3	19101.4	18344.9	17983.4
65°	6979.6	7109.2	8003.3	9903.4	12719.2	15829.8	18936.4	19753.8	19765.6	18967.8	18370.5
67.5°	4647.1	5020.5	5796.6	7431.5	10384.8	14098.6	18453.0	19850.1	19964.1	19182.0	18175.9
70°	2267.6	2758.8	3519.3	4829.9	7431.5	11444.0	17189.5	19060.2	19313.7	18557.1	17016.6
72.5°	941.2	1100.4	1515.0	2383.5	4265.9	7722.3	14650.8	16918.4	17388.0	16442.8	14306.9
75°	634.7	687.7	866.6	1222.2	1943.4	3808.1	10565.6	12615.1	13371.6	12418.6	10151.0
77.5°	489.3	522.7	630.8	854.8	1155.4	1440.3	5655.2	7602.5	7993.5	7400.1	5281.8
80°	385.1	410.7	471.6	622.9	819.4	770.3	1927.6	3444.6	3670.6	3079.1	1697.7
82.5°	334.0	343.9	338.0	422.5	544.3	450.0	632.7	1271.3	1403.0	1017.9	554.1
85°	241.7	269.2	281.0	261.3	288.9	227.9	259.4	450.0	495.2	442.1	312.4
87.5°	98.2	145.4	178.8	169.0	106.1	64.8	80.6	131.7	151.3	165.1	102.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P884089
 CATALOG NUMBER: NAV-SB4D-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0	4148.0
2.5°	4152.0	4165.7	4175.6	4187.3	4195.2	4207.0	4230.6	4244.3	4246.3	4256.1	4254.2
5°	4189.3	4209.0	4230.6	4262.0	4297.4	4326.9	4372.0	4403.5	4415.3	4425.1	4423.1
7.5°	4269.9	4297.4	4336.7	4391.7	4442.8	4482.1	4537.1	4574.4	4611.8	4625.5	4627.5
10°	4389.7	4429.0	4486.0	4560.7	4615.7	4666.8	4723.8	4755.2	4792.6	4808.3	4816.1
12.5°	4539.1	4580.3	4655.0	4759.1	4810.2	4845.6	4865.3	4857.4	4865.3	4879.0	4882.9
15°	4710.0	4755.2	4839.7	4951.7	4987.1	4955.6	4912.4	4873.1	4867.2	4871.2	4884.9
17.5°	4912.4	4945.8	5044.1	5138.4	5112.8	4983.2	4888.8	4826.0	4794.5	4784.7	4798.4
20°	5195.4	5195.4	5275.9	5334.9	5163.9	4943.9	4796.5	4694.3	4629.5	4602.0	4596.1
22.5°	5539.2	5507.8	5558.9	5517.6	5154.1	4833.8	4629.5	4452.6	4354.4	4315.1	4309.2
25°	5975.5	5938.1	5924.4	5668.9	5083.4	4658.9	4326.9	4112.7	4026.2	4004.6	4008.5
27.5°	6633.7	6539.4	6360.6	5751.5	4953.7	4383.8	3973.2	3774.7	3725.6	3727.5	3733.4
30°	7510.1	7321.5	6883.3	5765.2	4741.5	3994.8	3611.6	3470.1	3446.6	3456.4	3489.8
32.5°	8321.6	8142.8	7417.7	5702.3	4415.3	3613.6	3287.4	3193.1	3157.7	3169.5	3185.2
35°	8958.3	8909.2	7912.9	5613.9	4014.4	3255.9	2996.6	2916.0	2847.2	2831.5	2843.3
37.5°	9559.6	9539.9	8284.3	5490.1	3617.5	3002.5	2762.7	2656.6	2556.4	2501.4	2503.4
40°	10219.8	10200.1	8528.0	5299.5	3265.8	2782.4	2552.5	2413.0	2289.2	2189.0	2198.8
42.5°	10962.5	10846.6	8643.9	5026.4	2967.1	2595.7	2381.5	2192.9	2029.8	1937.5	1943.4
45°	11774.1	11512.7	8641.9	4678.6	2715.6	2424.8	2198.8	1931.6	1780.3	1693.8	1689.9
47.5°	12634.7	12149.4	8535.8	4293.5	2471.9	2236.1	1915.8	1711.5	1611.3	1558.2	1546.4
50°	13522.9	12744.8	8355.0	3851.3	2222.4	2022.0	1739.0	1599.5	1522.8	1473.7	1456.0
52.5°	14358.0	13285.1	8136.9	3350.3	1968.9	1813.7	1660.4	1552.3	1471.8	1416.7	1393.2
55°	15134.2	13750.8	7828.4	2837.4	1762.6	1674.2	1623.1	1532.7	1440.3	1375.5	1349.9
57.5°	15823.9	14053.4	7295.9	2356.0	1615.2	1577.9	1583.8	1499.3	1393.2	1338.1	1302.8
60°	16397.6	14275.5	6508.0	1909.9	1495.3	1483.5	1522.8	1436.4	1312.6	1249.7	1222.2
62.5°	16741.5	14271.5	5541.2	1564.1	1393.2	1397.1	1442.3	1357.8	1232.0	1173.1	1155.4
65°	16712.0	13921.8	4480.1	1338.1	1294.9	1298.8	1357.8	1271.3	1165.2	1129.9	1127.9
67.5°	16120.6	13069.0	3436.7	1190.8	1186.8	1204.5	1273.3	1212.4	1124.0	1120.0	1125.9
70°	14519.1	11298.6	2475.9	1072.9	1074.8	1100.4	1190.8	1175.0	1102.3	1110.2	1108.2
72.5°	11642.4	8614.4	1662.4	949.1	951.0	992.3	1112.2	1145.6	1080.7	1184.9	1200.6
75°	7753.8	5372.2	1068.9	817.4	819.4	872.4	1043.4	1088.6	1021.8	1180.9	1190.8
77.5°	3725.6	2414.9	774.2	687.7	687.7	736.9	901.9	974.6	870.5	917.6	841.0
80°	1287.1	907.8	609.1	554.1	542.3	575.7	760.4	844.9	750.6	691.7	648.4
82.5°	507.0	471.6	489.3	430.3	391.0	412.6	591.5	697.6	552.2	499.1	497.1
85°	290.8	306.5	345.8	284.9	226.0	253.5	434.3	501.1	416.6	367.4	375.3
87.5°	78.6	108.1	159.2	147.4	102.2	108.1	206.3	277.1	239.7	184.7	190.6
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)