

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: P885521

Luminaire Tested: **NAV-SB6D-830-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885521
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53416 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

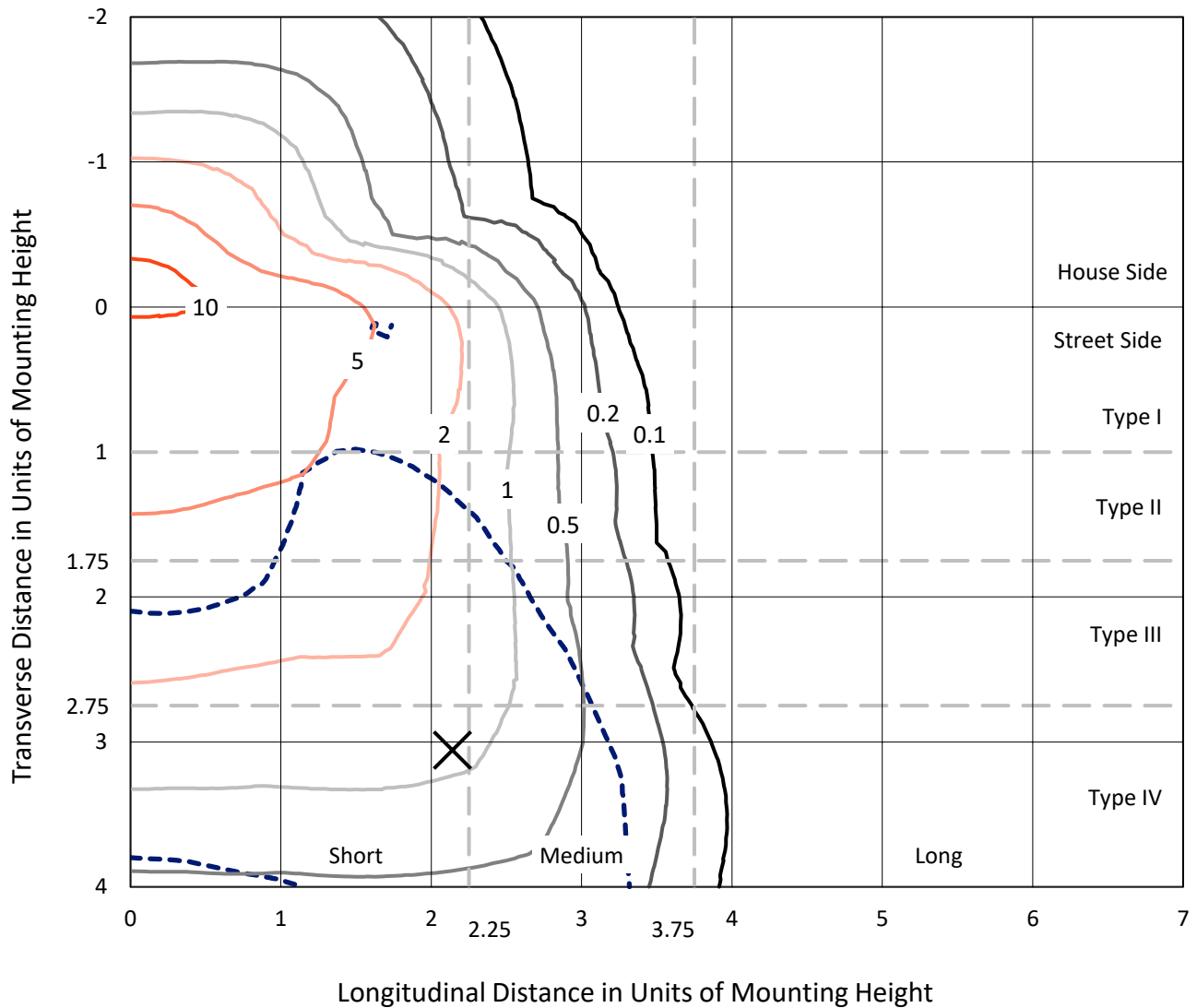
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P88521
 CATALOG NUMBER: NAV-SB6D-830-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

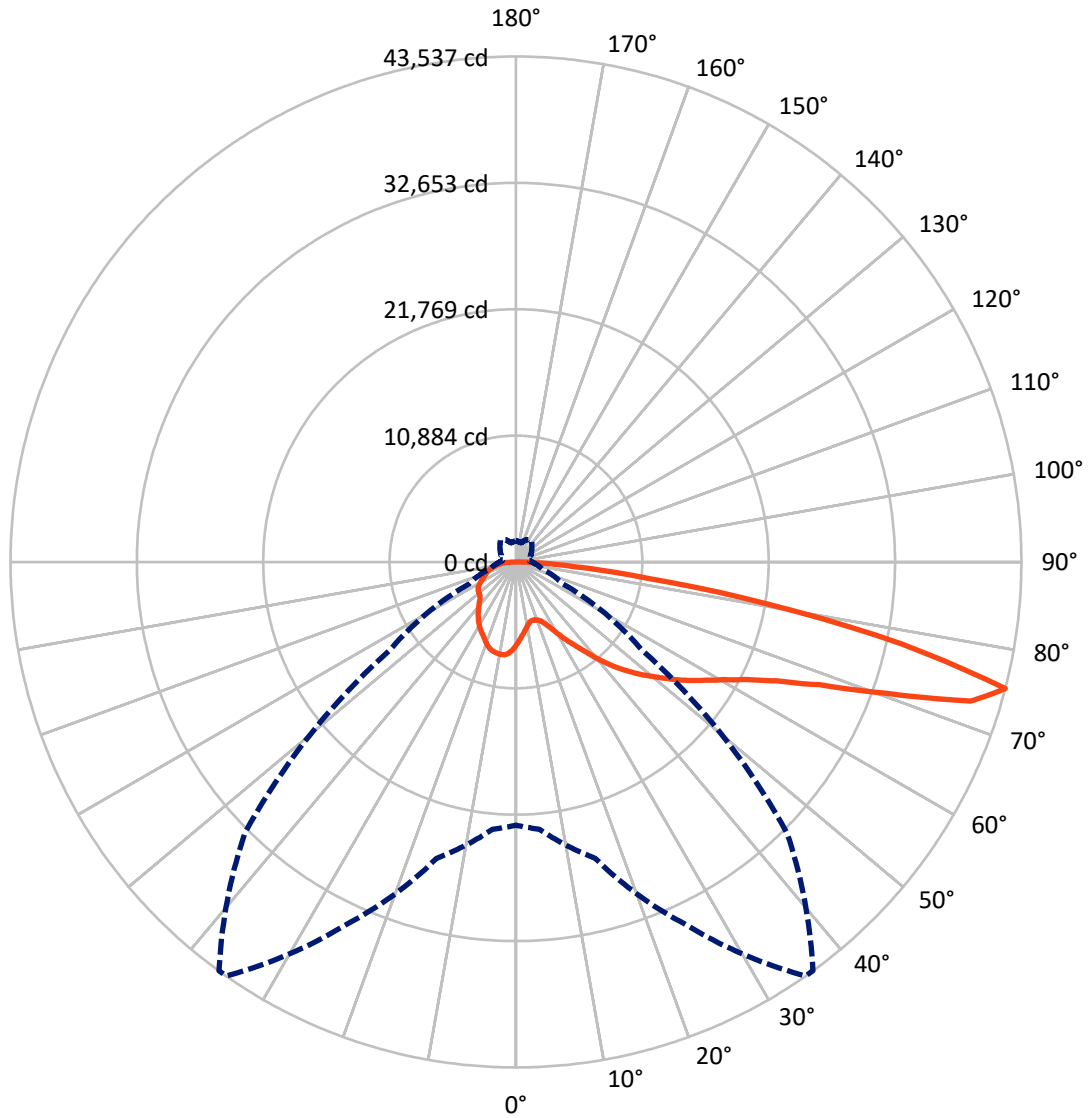
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P885521
CATALOG NUMBER: NAV-SB6D-830-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P885521
 CATALOG NUMBER: NAV-SB6D-830-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12711.7	0.0	12711.7
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	40704.3	0.0	40704.3
	% Fixture	76.2	0.0	76.2
Total	Lumens	53416.0	0.0	53416.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	673.9	1.3
10°-20°	1943.9	3.6
20°-30°	3264.4	6.1
30°-40°	5073.3	9.5
40°-50°	7530.1	14.1
50°-60°	10395.7	19.5
60°-70°	12612.4	23.6
70°-80°	10423.2	19.5
80°-90°	1499.2	2.8
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°	53416.0	100.0
0°-180°	53416.0	100.0

Coefficient of Utilization



REPORT NUMBER: P885521

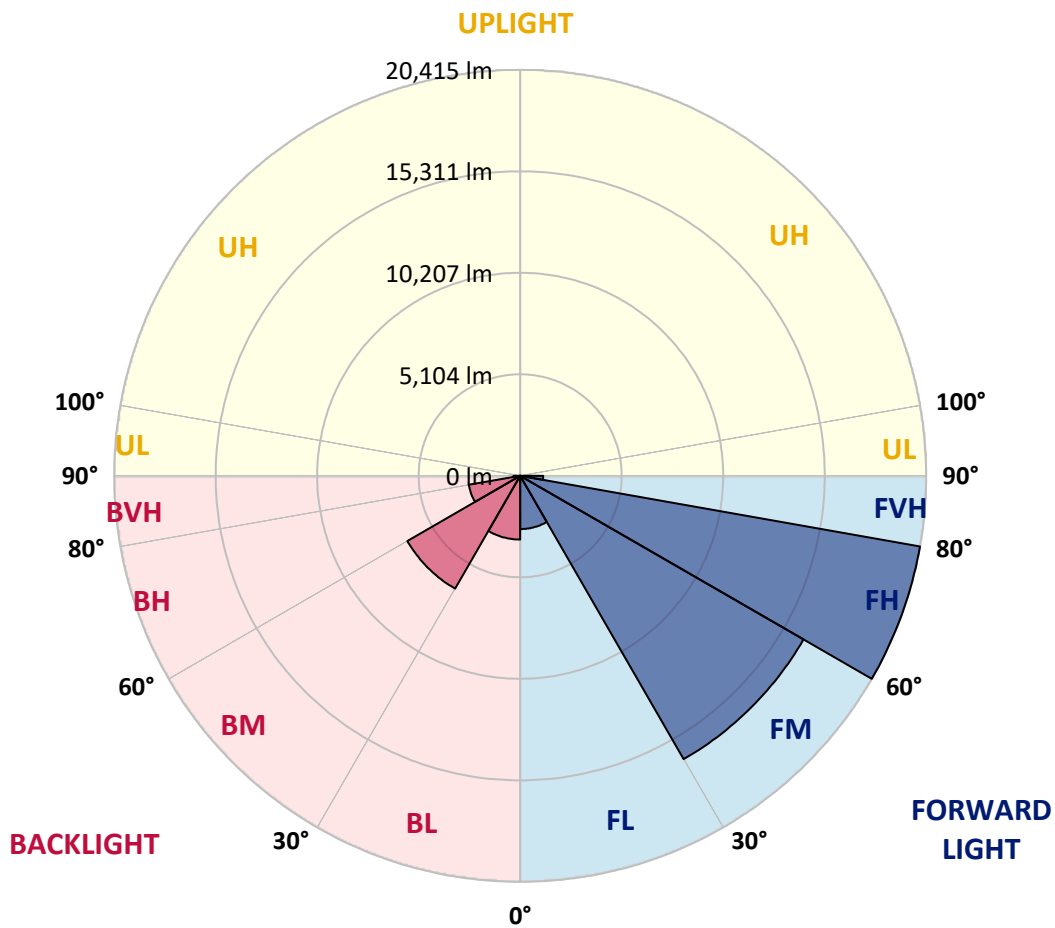
CATALOG NUMBER: NAV-SB6D-830-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2678.7	5.0			
FM (30°-60°)	16449.2	30.8			
FH (60°-80°)	20414.8	38.2			G5
FVH (80°-90°)	1161.6	2.2			G5
BL (0°-30°)	3203.5	6.0	B4/5000		
BM (30°-60°)	6549.8	12.3	B4/8500		
BH (60°-80°)	2620.8	4.9	B4/5000		G4/5000
BVH (80°-90°)	337.6	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short



REPORT NUMBER: P885521
 CATALOG NUMBER: NAV-SB6D-830-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0
2.5°	6563.6	6604.0	6621.4	6612.7	6656.0	6650.2	6710.9	6786.0	6889.9	6991.0	7138.3
5°	6058.3	6101.6	6139.1	6173.8	6257.5	6283.5	6378.8	6523.2	6713.8	6907.2	7149.8
7.5°	5587.6	5625.1	5682.9	5746.4	5887.9	5913.9	6072.7	6298.0	6563.6	6846.6	7181.6
10°	5203.5	5241.1	5301.7	5373.9	5550.1	5581.8	5784.0	6084.3	6430.8	6788.9	7216.2
12.5°	5038.9	5050.5	5085.1	5157.3	5310.4	5330.6	5552.9	5896.6	6300.8	6745.5	7268.2
15°	5030.3	5053.4	5056.3	5093.8	5220.9	5229.5	5434.5	5775.3	6220.0	6736.9	7346.2
17.5°	5116.9	5134.2	5108.2	5131.3	5238.2	5252.6	5414.3	5717.5	6194.0	6774.4	7479.0
20°	5347.9	5362.4	5284.4	5252.6	5330.6	5342.1	5501.0	5755.1	6220.0	6852.4	7660.9
22.5°	5838.8	5847.5	5656.9	5527.0	5532.7	5538.5	5677.1	5908.1	6321.1	6993.9	7891.9
25°	6604.0	6598.3	6295.1	6043.8	5899.5	5867.7	5960.1	6156.5	6491.4	7181.6	8189.4
27.5°	7499.2	7455.9	7152.7	6777.3	6462.5	6416.3	6396.1	6479.9	6734.0	7429.9	8553.2
30°	8509.9	8469.5	8143.2	7652.3	7216.2	7141.1	6950.6	6907.2	7094.9	7767.8	9058.5
32.5°	9618.7	9592.8	9202.9	8608.1	8024.8	7938.1	7617.6	7502.1	7649.4	8278.9	9763.1
35°	10548.6	10525.5	10202.0	9589.9	8876.6	8769.8	8443.5	8313.5	8388.6	8934.4	10684.3
37.5°	11388.9	11377.3	11100.1	10617.9	9881.5	9751.6	9384.8	9341.5	9327.1	9797.8	11801.8
40°	12168.5	12139.7	11850.9	11596.8	11051.0	10932.6	10609.2	10571.7	10461.9	10860.4	13066.6
42.5°	13031.9	12956.9	12538.2	12419.8	12272.5	12174.3	11980.8	11986.6	11744.0	12058.8	14406.5
45°	13736.5	13693.2	13263.0	13193.6	13352.5	13312.0	13479.5	13522.8	13052.2	13314.9	15798.3
47.5°	14493.1	14452.7	14088.8	14039.7	14470.0	14481.5	15073.5	15087.9	14328.5	14620.1	17193.0
50°	15425.8	15368.0	15007.1	15067.7	15550.0	15593.3	16676.1	16578.0	15503.8	15945.6	18576.2
52.5°	16040.9	16075.5	15997.5	16095.7	16754.1	16794.5	18252.8	18001.6	16667.5	17253.7	19933.4
55°	16494.2	16563.5	16806.1	17031.3	18024.7	18065.1	19739.9	19355.9	17632.0	18466.5	21209.7
57.5°	17077.5	16979.3	17432.7	17871.6	19231.7	19338.6	21186.6	20661.1	18486.7	19511.8	22084.7
60°	17914.9	17845.6	18197.9	18847.7	20583.1	20753.5	22717.1	21836.4	19113.3	20340.6	22255.1
62.5°	19612.9	19439.6	19494.5	20069.1	22286.8	22512.1	24443.9	22861.5	19425.2	20664.0	21342.6
65°	22151.1	21853.7	21576.5	21975.0	24686.5	24908.8	26393.1	23667.1	19309.7	20037.4	18919.8
67.5°	25347.7	25053.2	24712.5	25087.9	28220.9	28397.1	28798.5	24120.5	18400.1	17623.3	14637.5
70°	27984.2	27874.4	28281.6	29826.5	33866.3	33872.1	31882.5	23745.1	15908.0	12494.8	8469.5
72.5°	27634.8	27568.3	29713.9	34490.0	40981.4	40828.4	34801.9	20903.7	10716.0	5636.7	3173.5
75°	22670.9	23101.2	26424.8	34406.3	43537.0	43516.8	33014.4	13288.9	4432.5	2336.1	1640.2
77.5°	12157.0	12838.5	17155.5	25402.6	33987.6	34498.7	23210.9	4649.1	1903.0	1495.8	1134.8
80°	3964.7	4559.6	6837.9	12933.8	22084.7	21989.4	9947.9	1825.0	1302.3	1059.8	785.4
82.5°	1683.5	1752.8	3055.1	6107.4	11334.0	11157.9	3167.7	1048.2	915.4	724.8	485.1
85°	658.4	736.3	1348.5	2824.1	4909.0	4802.2	1143.5	519.8	586.2	473.6	288.8
87.5°	216.6	262.8	482.2	967.4	1527.6	1472.7	280.1	179.0	254.1	216.6	104.0
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: P885521
 CATALOG NUMBER: NAV-SB6D-830-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0	7118.0
2.5°	7178.7	7224.9	7279.8	7360.6	7429.9	7487.7	7548.3	7585.8	7600.3	7643.6	7640.7
5°	7230.7	7331.7	7467.4	7600.3	7730.2	7808.2	7877.5	7912.1	7943.9	7967.0	7972.8
7.5°	7317.3	7447.2	7660.9	7834.2	7943.9	8007.4	8053.6	8042.1	8053.6	8059.4	8068.1
10°	7392.4	7574.3	7828.4	7993.0	8076.7	8079.6	8068.1	8027.7	8007.4	8010.3	8016.1
12.5°	7481.9	7684.0	7958.3	8097.0	8120.1	8056.5	8007.4	7938.1	7912.1	7900.6	7894.8
15°	7603.2	7834.2	8099.8	8151.8	8094.1	8013.2	7929.5	7816.9	7759.1	7712.9	7727.3
17.5°	7750.4	8004.6	8209.6	8172.0	8047.9	7915.0	7779.3	7608.9	7490.5	7441.5	7444.3
20°	7955.5	8183.6	8293.3	8128.7	7941.0	7738.9	7507.9	7300.0	7190.2	7141.1	7135.4
22.5°	8203.8	8423.3	8374.2	8053.6	7788.0	7464.6	7175.8	7022.8	6967.9	6933.2	6939.0
25°	8501.2	8688.9	8431.9	7943.9	7536.8	7100.7	6878.4	6829.3	6803.3	6777.3	6777.3
27.5°	8888.2	8989.2	8475.2	7782.2	7144.0	6713.8	6632.9	6641.6	6632.9	6589.6	6598.3
30°	9399.3	9379.1	8515.7	7519.4	6693.6	6364.4	6370.1	6407.7	6413.5	6384.6	6399.0
32.5°	10072.1	9867.1	8535.9	7178.7	6263.3	6058.3	6064.1	6104.5	6133.4	6084.3	6107.4
35°	10886.4	10435.9	8504.1	6751.3	5931.2	5766.6	5723.3	5734.9	5743.5	5697.3	5729.1
37.5°	11836.5	11074.1	8362.6	6277.7	5656.9	5480.7	5388.3	5310.4	5264.2	5220.9	5249.7
40°	12878.9	11770.0	8102.7	5815.7	5350.8	5177.5	5038.9	4891.7	4735.7	4678.0	4704.0
42.5°	13970.4	12486.2	7788.0	5373.9	4998.5	4857.0	4709.7	4496.1	4262.2	4143.8	4158.2
45°	15102.4	13219.6	7479.0	4937.9	4637.6	4576.9	4406.5	4149.5	3895.4	3745.3	3733.7
47.5°	16211.2	13912.7	7025.6	4498.9	4299.7	4366.1	4233.3	3996.5	3713.5	3476.7	3450.7
50°	17271.0	14562.4	6283.5	4054.3	4025.4	4302.6	4175.5	3834.8	3511.4	3208.2	3182.2
52.5°	18322.1	15087.9	5333.5	3650.0	3878.1	4285.3	4100.5	3725.1	3329.5	3011.8	2977.2
55°	19214.4	15359.4	4418.1	3303.5	3664.4	4138.0	4010.9	3595.1	3072.5	2734.6	2705.7
57.5°	19722.6	15139.9	3655.8	2962.7	3369.9	3895.4	3857.9	3317.9	2766.4	2506.5	2471.8
60°	19503.1	14250.5	3032.0	2665.3	3089.8	3632.7	3592.2	3043.6	2532.5	2287.0	2252.4
62.5°	18293.2	12555.5	2538.2	2405.4	2835.7	3364.1	3326.6	2832.8	2353.4	2116.6	2079.1
65°	15856.1	10213.6	2154.2	2188.8	2578.7	3040.7	3095.6	2656.6	2211.9	1980.9	1943.4
67.5°	12093.5	7398.1	1853.9	2001.1	2327.4	2723.0	2881.9	2529.6	2093.5	1874.1	1839.4
70°	6892.8	4201.5	1599.8	1819.2	2105.1	2428.5	2717.3	2428.5	1966.5	1784.6	1761.5
72.5°	2613.3	1928.9	1383.2	1637.3	1891.4	2180.2	2535.4	2269.7	1819.2	1683.5	1660.4
75°	1394.7	1175.3	1163.7	1423.6	1646.0	1937.6	2307.2	2113.8	1709.5	1778.8	1836.5
77.5°	950.0	831.6	973.1	1218.6	1377.4	1669.1	2064.7	1877.0	1481.4	1475.6	1360.1
80°	658.4	589.1	791.2	981.8	1065.5	1403.4	1801.9	1611.3	1207.0	1126.2	1077.1
82.5°	395.6	384.1	592.0	733.5	753.7	1082.9	1492.9	1351.4	987.6	860.5	866.3
85°	216.6	228.1	378.3	430.3	438.9	756.6	1169.5	1045.3	759.5	638.2	643.9
87.5°	60.6	78.0	138.6	170.4	210.8	392.7	695.9	620.8	381.2	265.7	265.7
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)