

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: P969354

Luminaire Tested: **NAV-SB5D-740-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969354
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-740-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55633.9 lumens
Efficiency: N/A
Efficacy: 152.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

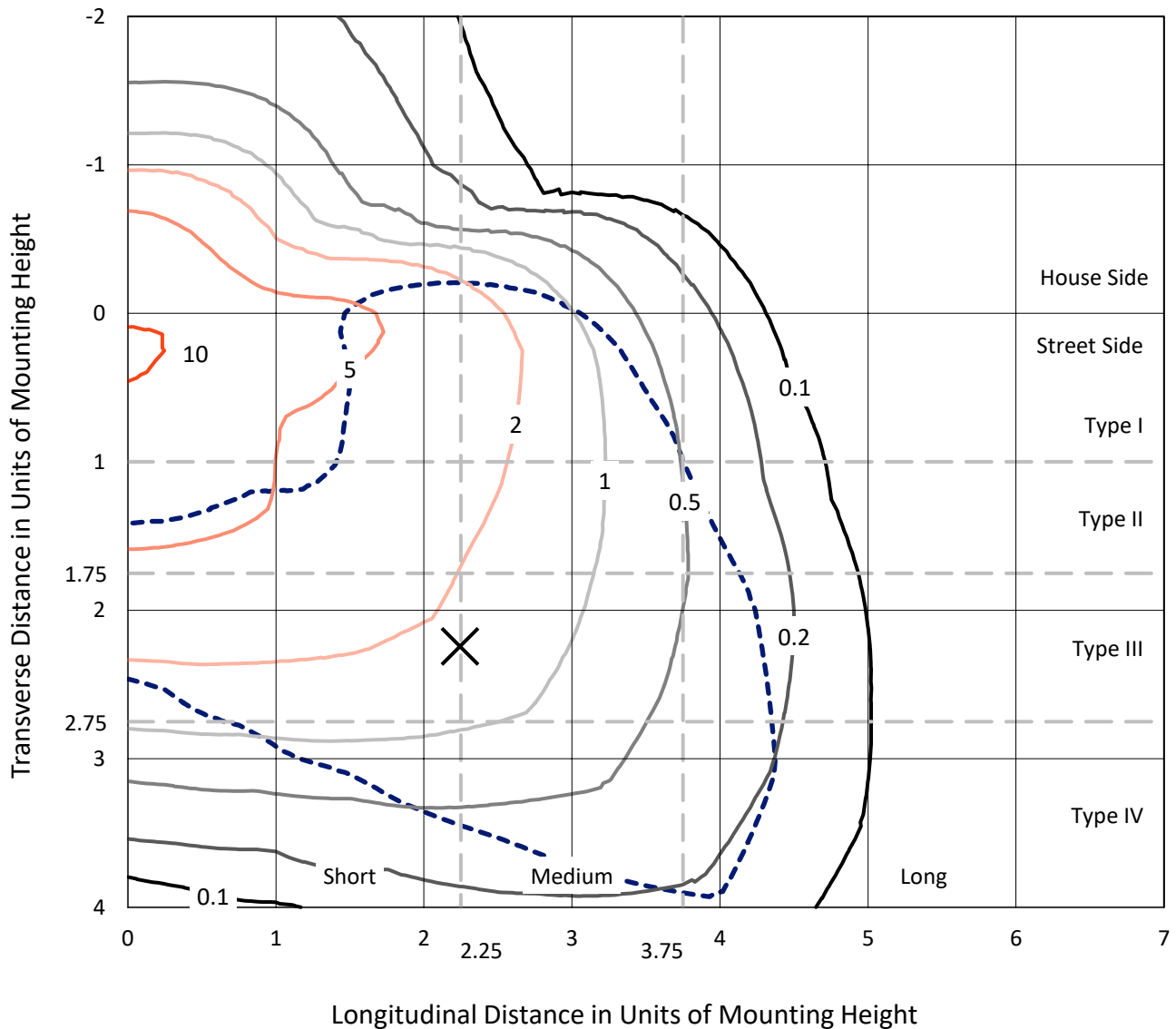


REPORT NUMBER: P969354

CATALOG NUMBER: NAV-SB5D-740-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

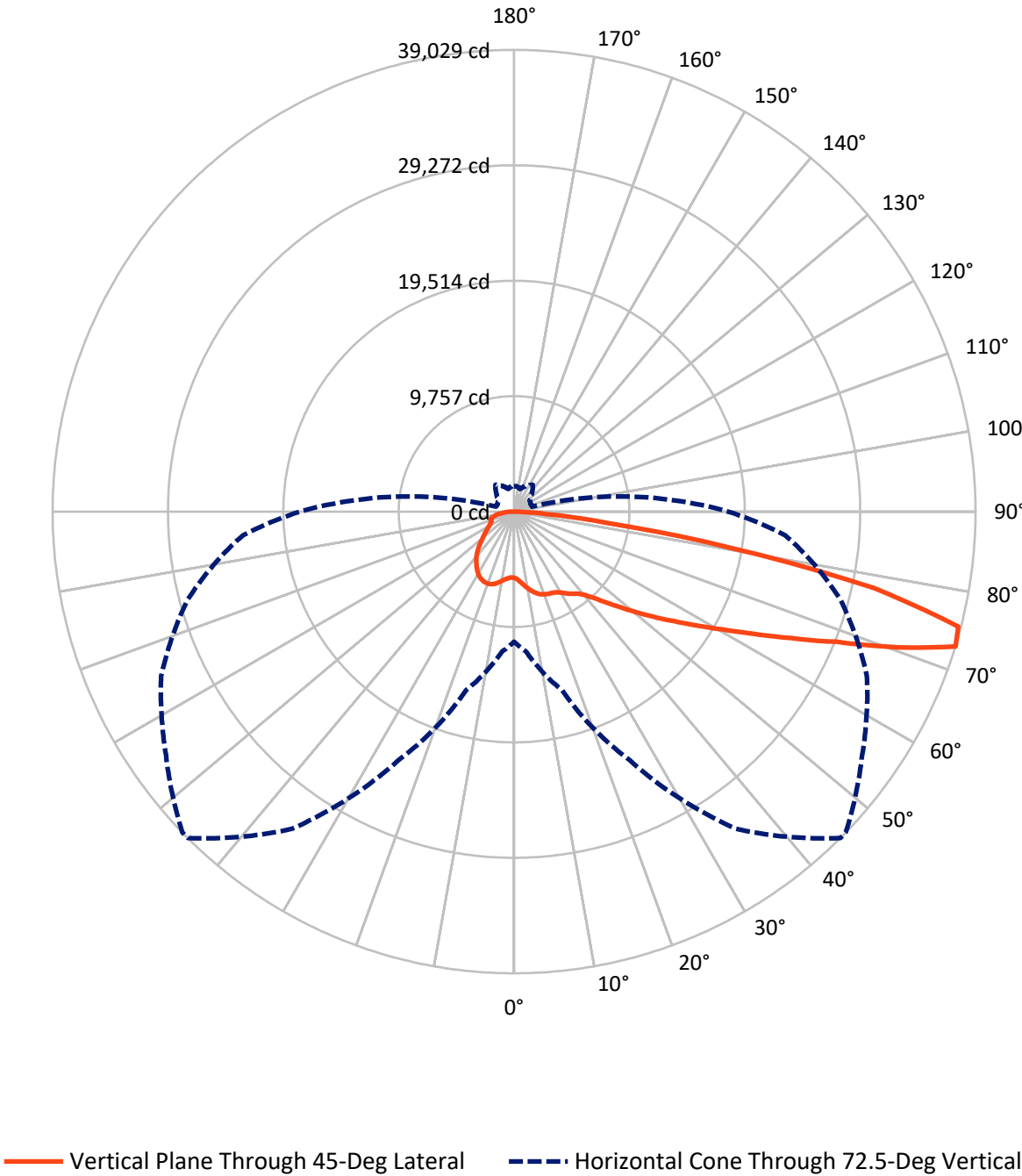
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc
Type IV - Short - N/A

REPORT NUMBER: P969354
CATALOG NUMBER: NAV-SB5D-740-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P969354

CATALOG NUMBER: NAV-SB5D-740-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12576.9	0.0	12576.9
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	43057.0	0.0	43057.0
	% Fixture	77.4	0.0	77.4
Total	Lumens	55633.9	0.0	55633.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	571.2	1.0
10°-20°	1904.6	3.4
20°-30°	3313.1	6.0
30°-40°	4749.5	8.5
40°-50°	6687.5	12.0
50°-60°	10243.4	18.4
60°-70°	14839.0	26.7
70°-80°	11849.8	21.3
80°-90°	1475.8	2.7
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°	55633.9	100.0
0°-180°	55633.9	100.0

Coefficient of Utilization



REPORT NUMBER: P969354

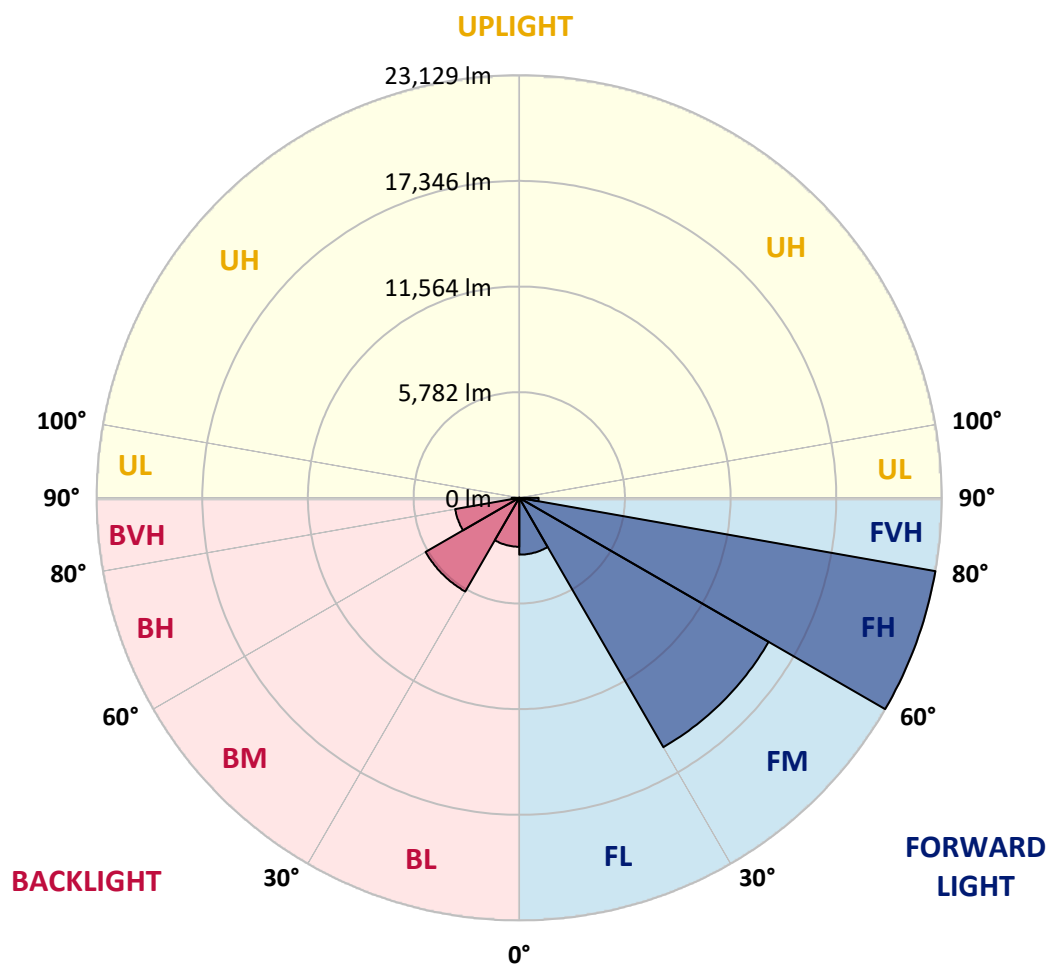
CATALOG NUMBER: NAV-SB5D-740-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3111.1	5.6			
FM	(30°-60°)	15758.4	28.3			
FH	(60°-80°)	23128.6	41.6			G5
FVH	(80°-90°)	1058.8	1.9			G5
BL	(0°-30°)	2677.7	4.8	B4/5000		
BM	(30°-60°)	5921.9	10.6	B4/8500		
BH	(60°-80°)	3560.2	6.4	B4/5000		G4/5000
BVH	(80°-90°)	417.1	0.7			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: P969354

CATALOG NUMBER: NAV-SB5D-740-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4
2.5°	5832.1	5870.3	5835.1	5802.8	5788.2	5750.1	5747.2	5723.7	5709.0	5668.0	5656.4
5°	6239.6	6289.4	6230.8	6166.3	6107.7	6013.9	6002.2	5934.7	5858.6	5770.6	5720.8
7.5°	6699.7	6743.7	6676.2	6579.6	6477.0	6321.6	6318.7	6195.6	6075.5	5925.9	5841.0
10°	7101.2	7159.8	7068.9	6937.1	6808.2	6632.3	6611.8	6471.1	6318.7	6125.3	5996.4
12.5°	7455.8	7496.8	7408.9	7247.8	7098.2	6922.4	6896.1	6740.7	6570.8	6350.9	6186.8
15°	7737.2	7789.9	7672.7	7499.8	7341.6	7168.6	7145.2	7004.4	6834.5	6602.9	6392.0
17.5°	7921.8	7965.8	7845.7	7652.1	7499.8	7356.2	7338.6	7221.3	7071.9	6837.5	6611.8
20°	7992.1	8039.1	7913.0	7716.6	7576.0	7464.6	7455.8	7370.9	7268.3	7054.4	6825.7
22.5°	8062.4	8106.4	7942.3	7737.2	7614.1	7543.7	7540.8	7485.2	7444.1	7268.3	7045.5
25°	8346.8	8358.5	8138.7	7842.7	7666.8	7605.3	7602.3	7599.5	7617.0	7479.2	7282.9
27.5°	8593.0	8590.0	8402.4	8124.0	7851.5	7722.6	7719.6	7748.9	7804.6	7690.3	7529.1
30°	8953.5	8921.2	8698.5	8408.3	8159.2	7959.9	7942.3	7916.0	7959.9	7869.0	7775.2
32.5°	9718.3	9615.7	9255.3	8739.5	8414.2	8261.8	8238.3	8074.2	8091.8	8036.1	7989.3
35°	10814.5	10679.7	10199.0	9366.7	8730.7	8513.9	8502.1	8294.0	8258.8	8209.0	8226.6
37.5°	12118.7	11951.6	11391.8	10275.2	9275.8	8806.9	8789.3	8601.7	8458.1	8405.4	8505.0
40°	13428.7	13217.7	12754.6	11383.0	10078.8	9296.3	9240.7	8956.3	8792.2	8704.3	8915.3
42.5°	14700.7	14524.8	14129.1	12625.6	11069.4	10011.4	9888.4	9401.8	9278.7	9196.7	9577.7
45°	15826.0	15667.7	15377.7	13953.3	12230.0	10984.4	10864.3	10070.0	10032.0	10032.0	10582.9
47.5°	16740.4	16705.2	16397.5	15307.2	13598.7	12092.2	11884.2	10999.1	11101.7	11259.9	12010.2
50°	17754.4	17657.8	17329.5	16640.8	15207.6	13361.3	13191.3	12139.2	12523.0	12956.8	14073.5
52.5°	18686.5	18739.2	18372.8	18030.0	17024.7	14776.8	14477.9	13484.4	14313.8	15031.8	16491.3
55°	19644.8	19647.7	19545.1	19498.3	18929.7	16341.9	16013.6	15102.1	16421.0	17311.9	19310.7
57.5°	20544.5	20550.4	20702.7	21116.0	21139.5	18147.2	17774.9	17089.2	18762.6	19671.2	22218.0
60°	21347.6	21388.6	21804.7	22771.9	23082.6	20216.3	19864.6	19436.7	21183.5	22097.9	25274.8
62.5°	21617.1	21766.7	22692.8	24067.3	25002.2	22754.3	22408.4	22153.5	23727.3	24577.2	27830.4
65°	21160.0	21502.9	23293.5	25137.0	26977.5	25770.0	25427.2	25148.8	26370.9	27170.9	29928.8
67.5°	20037.5	20480.0	23258.4	26259.5	29374.9	29398.3	29078.8	28425.3	29204.9	29512.6	30611.6
70°	17080.4	17742.8	21209.8	26678.6	32126.9	34360.0	34052.3	32370.1	32033.1	30544.3	28689.0
72.5°	11004.9	11895.9	15617.9	23229.1	32739.4	39028.7	39011.2	35931.0	32926.9	28539.6	23009.3
75°	4015.1	4560.2	7256.5	14580.4	27481.6	38791.3	38905.6	35321.4	30057.7	22045.1	14334.3
77.5°	1462.5	1600.2	2368.1	5603.6	16901.6	31124.5	31361.9	28237.7	21394.4	11063.5	5679.8
80°	767.8	844.1	1213.3	2174.6	7241.8	18484.2	18856.4	16781.5	10055.4	3332.3	1702.7
82.5°	425.0	460.1	679.9	1181.1	3262.0	7904.2	8126.9	6629.4	3537.4	1412.7	703.4
85°	228.6	243.2	319.5	644.7	1594.3	2740.2	2801.8	1981.2	1409.7	829.4	340.0
87.5°	67.4	82.1	105.5	205.1	624.2	615.4	630.1	392.7	556.9	419.1	111.4
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: P969354

CATALOG NUMBER: NAV-SB5D-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4	5612.4
2.5°	5638.7	5629.9	5597.7	5583.1	5565.4	5562.6	5577.2	5580.1	5583.1	5586.0	5597.7
5°	5691.5	5662.2	5632.9	5615.4	5621.2	5624.1	5653.4	5673.9	5688.5	5700.3	5706.2
7.5°	5794.1	5770.6	5720.8	5717.9	5726.7	5753.0	5791.1	5838.1	5864.4	5884.9	5890.8
10°	5946.4	5902.6	5843.9	5852.7	5870.3	5908.4	5987.5	6025.6	6069.5	6107.7	6098.9
12.5°	6101.8	6063.7	5996.4	6002.2	6031.5	6098.9	6175.1	6222.0	6251.3	6280.6	6292.3
15°	6304.1	6236.6	6163.3	6163.3	6216.1	6289.4	6324.6	6362.7	6380.2	6412.5	6424.2
17.5°	6512.1	6424.2	6327.5	6321.6	6386.1	6421.3	6441.8	6447.7	6453.5	6488.7	6500.4
20°	6720.2	6623.4	6485.8	6474.0	6488.7	6482.8	6479.8	6474.0	6482.8	6526.8	6544.3
22.5°	6925.3	6814.0	6623.4	6570.8	6529.7	6474.0	6471.1	6468.2	6474.0	6518.0	6547.3
25°	7165.7	7030.9	6775.9	6617.6	6479.8	6403.7	6412.5	6415.4	6421.3	6456.5	6503.3
27.5°	7426.5	7277.1	6916.6	6602.9	6353.9	6301.1	6286.4	6295.2	6315.7	6371.4	6427.2
30°	7687.4	7511.5	7045.5	6544.3	6195.6	6122.3	6075.5	6096.0	6160.5	6216.1	6277.6
32.5°	7924.8	7748.9	7148.0	6415.4	5993.4	5879.1	5817.5	5843.9	5908.4	5928.9	6002.2
35°	8203.2	8003.9	7192.0	6210.3	5773.6	5597.7	5515.6	5477.6	5509.8	5489.3	5553.8
37.5°	8513.9	8305.8	7186.2	5940.6	5515.6	5313.4	5199.1	5055.5	4988.2	4917.7	4961.7
40°	8974.0	8675.0	7115.9	5615.4	5196.2	5011.5	4806.4	4563.2	4410.8	4273.0	4281.8
42.5°	9601.2	9187.9	6986.9	5257.7	4835.7	4662.8	4384.4	4100.1	3859.8	3631.2	3610.7
45°	10536.1	9859.1	6825.7	4876.7	4445.9	4276.0	3974.1	3654.6	3382.1	3089.0	3053.9
47.5°	11884.2	10761.7	6673.3	4443.0	4035.6	3880.3	3607.8	3311.8	2989.4	2705.1	2672.8
50°	13736.4	12057.1	6532.6	4021.0	3631.2	3514.0	3297.1	2995.3	2669.9	2441.3	2426.7
52.5°	16092.7	13818.4	6474.0	3613.6	3253.1	3209.2	3036.3	2754.9	2447.2	2253.8	2239.1
55°	18797.8	15925.6	6474.0	3223.8	2922.0	2936.6	2816.5	2555.6	2288.9	2116.0	2098.4
57.5°	21558.6	18059.3	6356.7	2863.3	2640.6	2702.1	2625.9	2397.4	2157.0	1978.2	1948.9
60°	24102.5	19847.0	5882.0	2535.1	2391.5	2488.2	2438.4	2242.0	1948.9	1799.5	1776.0
62.5°	26057.2	20855.2	4967.7	2274.3	2186.3	2297.7	2271.3	2036.9	1910.8	1849.3	1828.8
65°	27036.1	20691.1	3798.2	2042.7	2013.4	2186.3	2130.7	2121.9	2022.2	1951.9	1928.4
67.5°	26435.4	19278.4	2754.9	1872.8	1913.8	2083.7	2297.7	2332.9	2148.2	2010.5	1987.1
70°	23800.6	16722.9	2051.5	1711.5	1787.8	2086.7	2620.1	2441.3	2107.2	1946.1	1919.6
72.5°	18106.1	12470.4	1591.4	1541.6	1623.6	2101.4	2763.7	2391.5	1989.9	2151.2	2133.5
75°	10354.3	6846.2	1277.8	1333.5	1418.5	1963.6	2690.4	2262.6	1899.1	1975.3	1975.3
77.5°	3947.7	2631.8	1055.0	1128.3	1140.1	1714.5	2573.2	2253.8	1808.3	1764.3	1608.9
80°	1368.7	1028.7	873.4	896.8	882.1	1524.0	2467.7	1960.6	1480.0	1324.7	1280.7
82.5°	559.8	512.9	691.7	662.4	627.2	1184.0	1992.9	1603.1	1210.4	1069.7	1058.0
85°	243.2	325.3	457.2	401.5	363.4	820.6	1597.3	1356.9	1022.8	882.1	879.2
87.5°	49.8	123.1	193.4	181.7	187.6	548.1	1134.2	964.2	723.9	542.2	425.0
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)