

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: P964111

Luminaire Tested: **NAV-SB3B-750-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964111
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-750-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 5000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18334.2 lumens
Efficiency: N/A
Efficacy: 167.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

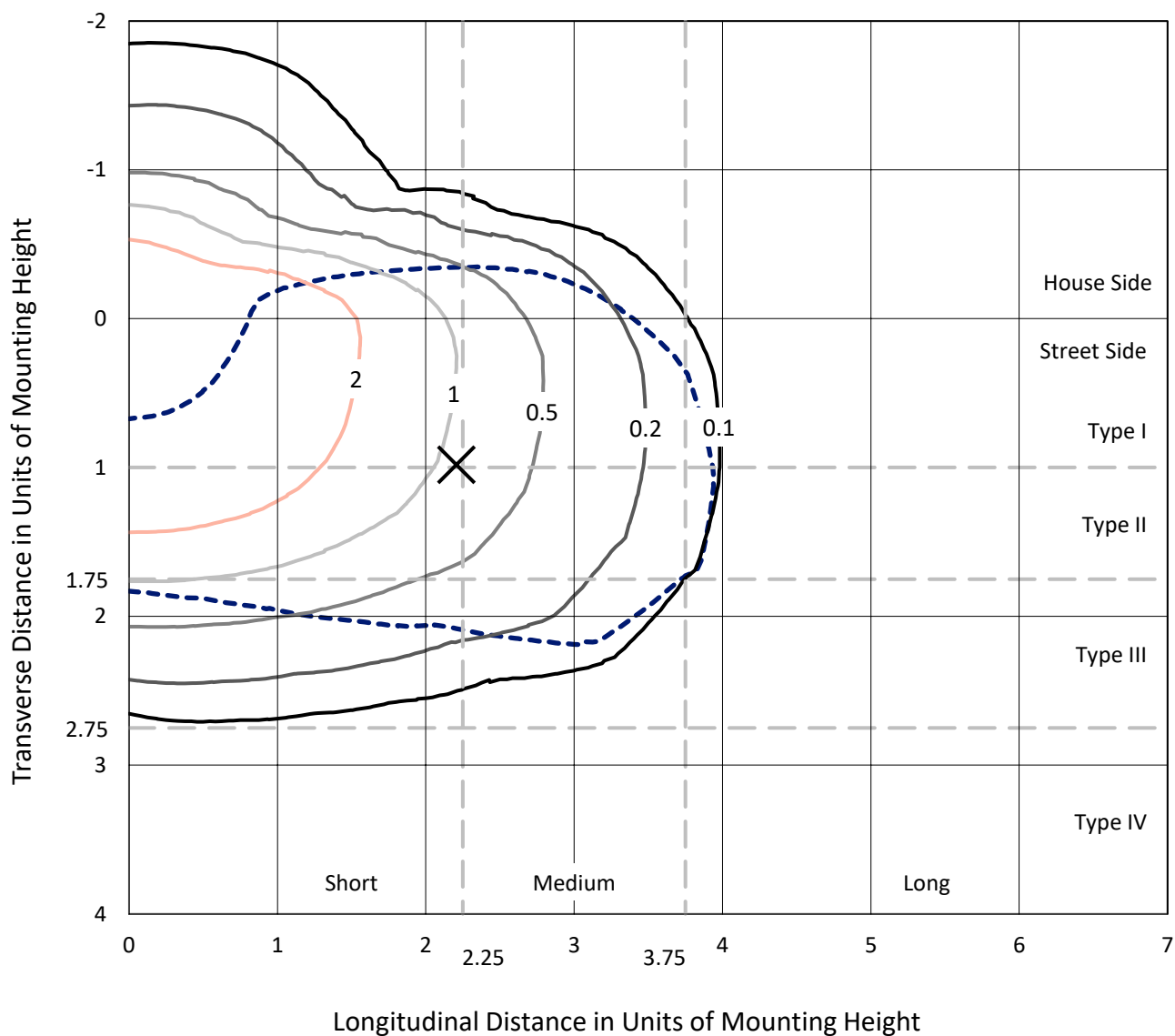
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P964111
CATALOG NUMBER: NAV-SB3B-750-U-T3

Iso-Footcandle Lines of Horizontal Illumination

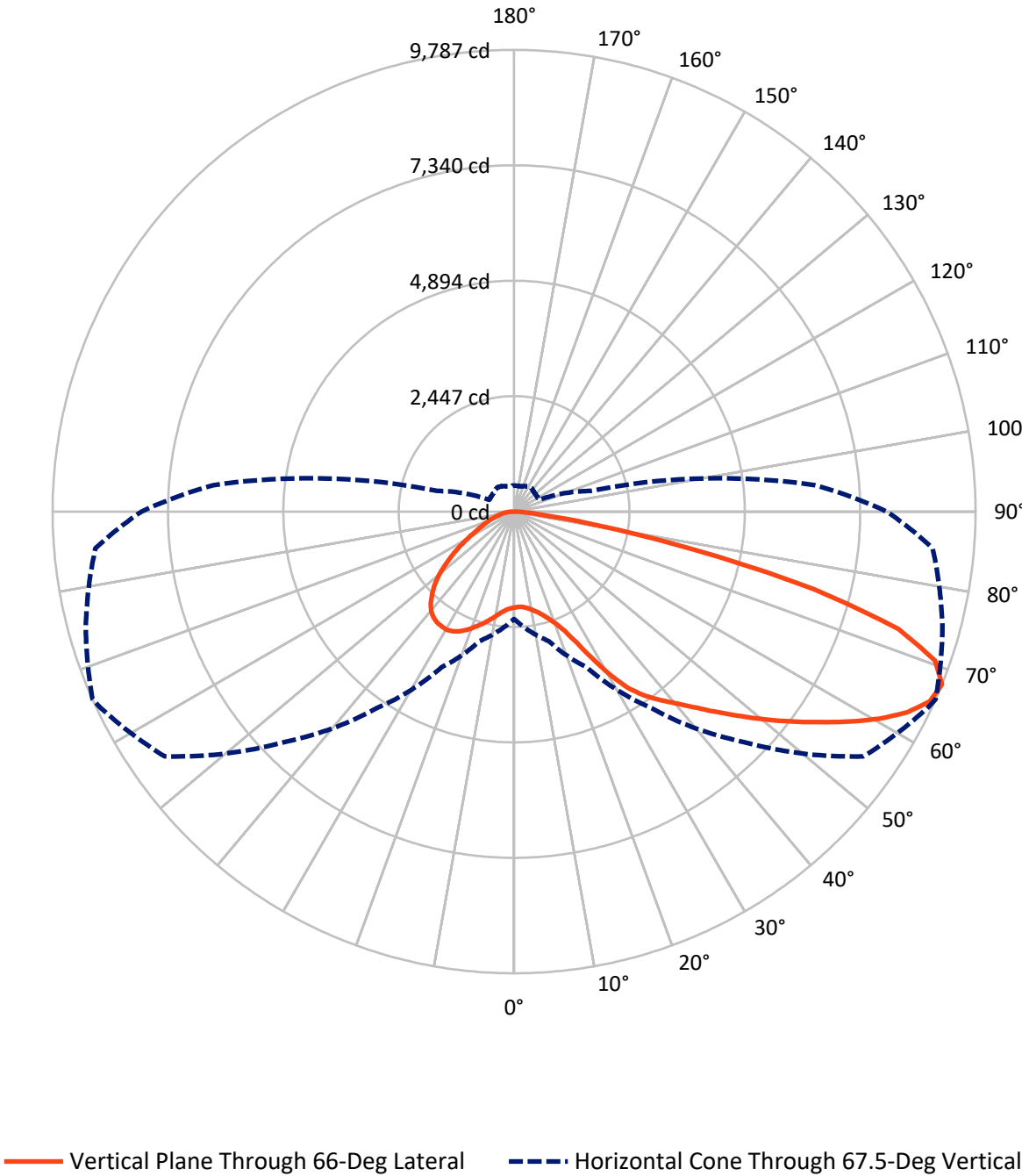
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type III - Short - N/A

REPORT NUMBER: P964111
CATALOG NUMBER: NAV-SB3B-750-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P964111

CATALOG NUMBER: NAV-SB3B-750-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4558.7	0.0	4558.7
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	13775.4	0.0	13775.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	18334.2	0.0	18334.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.6	1.1
10°-20°	666.1	3.6
20°-30°	1283.9	7.0
30°-40°	2251.1	12.3
40°-50°	3346.7	18.3
50°-60°	4242.2	23.1
60°-70°	4150.9	22.6
70°-80°	1980.0	10.8
80°-90°	211.6	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°	18334.2	100.0
0°-180°	18334.2	100.0

Coefficient of Utilization



REPORT NUMBER: P964111

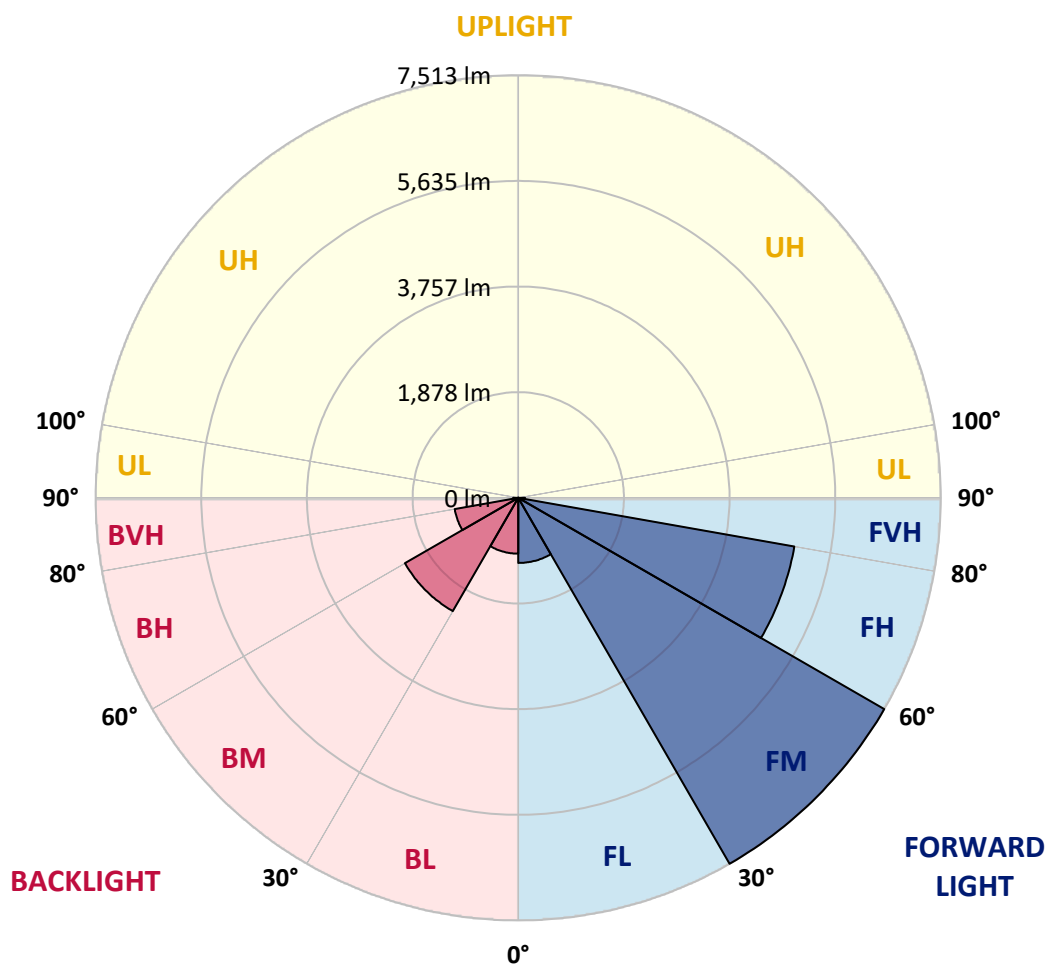
CATALOG NUMBER: NAV-SB3B-750-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1158.5	6.3			
FM	(30°-60°)	7513.2	41.0			
FH	(60°-80°)	4983.7	27.2			G2/5000
FVH	(80°-90°)	120.0	0.7			G2/225
BL	(0°-30°)	993.1	5.4	B2/1000		
BM	(30°-60°)	2326.8	12.7	B2/2500		
BH	(60°-80°)	1147.2	6.3	B3/2500		G3/2500
BVH	(80°-90°)	91.6	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



REPORT NUMBER: P964111

CATALOG NUMBER: NAV-SB3B-750-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5
2.5°	2012.3	2023.9	2021.0	2016.2	2015.2	2017.1	2020.0	2022.9	2021.9	2026.7	2034.4
5°	2006.5	2018.1	2017.1	2017.1	2021.0	2028.7	2033.5	2038.3	2033.5	2039.2	2049.9
7.5°	2010.3	2019.0	2022.9	2026.7	2036.4	2050.8	2062.4	2073.0	2067.2	2074.0	2087.4
10°	2059.5	2066.3	2070.1	2070.1	2076.9	2093.3	2104.7	2124.0	2119.2	2129.8	2147.2
12.5°	2149.1	2155.9	2155.9	2152.0	2156.8	2167.4	2171.3	2192.5	2183.8	2201.1	2218.4
15°	2258.9	2272.4	2261.8	2255.1	2256.9	2267.6	2266.6	2283.0	2274.4	2288.8	2304.2
17.5°	2380.3	2397.6	2380.3	2379.3	2375.4	2387.0	2387.9	2402.4	2387.0	2397.6	2408.2
20°	2523.9	2547.9	2533.5	2538.3	2529.6	2534.4	2539.2	2560.4	2536.4	2544.0	2541.2
22.5°	2726.1	2755.0	2739.6	2757.9	2752.1	2748.2	2747.3	2784.8	2747.3	2750.2	2722.3
25°	3020.9	3055.5	3028.6	3053.6	3053.6	3066.2	3080.6	3128.8	3066.2	3047.8	2975.6
27.5°	3456.3	3490.9	3438.0	3453.4	3448.6	3479.4	3464.0	3583.4	3516.0	3486.1	3340.7
30°	3980.3	4042.0	3941.7	3937.9	3933.1	3982.2	4004.4	4083.4	4015.0	3985.1	3809.8
32.5°	4546.7	4611.3	4491.9	4457.1	4438.9	4468.7	4450.3	4514.0	4466.7	4420.5	4203.8
35°	5145.9	5209.5	5095.8	5028.3	4955.2	4892.5	4827.0	4843.4	4799.2	4728.7	4504.4
37.5°	5712.3	5828.9	5708.4	5636.2	5501.4	5379.0	5195.9	5119.9	5078.5	5013.9	4787.6
40°	6289.3	6355.8	6264.3	6202.6	6056.2	5864.5	5571.7	5410.8	5354.9	5292.3	5100.6
42.5°	6714.2	6777.7	6728.6	6686.2	6571.6	6349.1	5970.4	5769.1	5688.2	5617.9	5455.2
45°	7051.3	7098.4	7067.7	7083.1	7034.0	6818.2	6383.7	6153.5	6069.6	5984.0	5855.8
47.5°	7187.1	7237.2	7286.3	7377.8	7461.6	7302.7	6827.8	6569.6	6481.0	6393.3	6267.2
50°	7171.7	7222.8	7365.3	7559.9	7819.9	7767.0	7296.0	7012.7	6930.8	6830.7	6714.2
52.5°	7048.4	7106.2	7289.2	7612.9	8027.1	8114.7	7772.8	7470.3	7393.2	7273.8	7157.3
55°	6724.7	6759.4	7034.0	7492.4	8076.2	8357.5	8240.0	7957.7	7880.7	7714.0	7586.8
57.5°	6124.6	6174.7	6574.5	7167.8	7952.9	8522.3	8650.3	8470.2	8396.0	8156.1	8023.2
60°	5341.5	5421.4	5879.0	6622.6	7638.9	8521.2	9023.1	8974.0	8912.4	8591.6	8452.9
62.5°	4455.2	4547.7	4988.0	5851.9	7089.8	8279.4	9256.3	9395.9	9364.1	8993.2	8816.0
65°	3421.6	3485.2	3923.5	4855.0	6235.4	7760.3	9283.2	9683.9	9689.7	9298.6	9005.8
67.5°	2278.2	2461.2	2841.7	3643.2	5091.0	6911.6	9046.2	9731.1	9787.0	9403.7	8910.4
70°	1111.6	1352.5	1725.3	2367.8	3643.2	5610.2	8426.8	9343.9	9468.1	9097.3	8342.1
72.5°	461.5	539.5	742.7	1168.5	2091.3	3785.7	7182.3	8293.9	8524.1	8060.8	7013.7
75°	311.2	337.1	424.8	599.2	952.7	1866.8	5179.6	6184.3	6555.2	6088.0	4976.4
77.5°	239.8	256.2	309.2	419.0	566.4	706.1	2772.3	3727.0	3918.7	3627.8	2589.4
80°	188.8	201.3	231.2	305.3	401.7	377.6	944.9	1688.7	1799.4	1509.5	832.3
82.5°	163.8	168.6	165.6	207.2	266.8	220.6	310.2	623.2	687.8	499.0	271.6
85°	118.5	132.0	137.8	128.1	141.6	111.7	127.2	220.6	242.7	216.8	153.1
87.5°	48.2	71.2	87.6	82.8	52.0	31.8	39.5	64.6	74.2	80.9	50.1
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: P964111

CATALOG NUMBER: NAV-SB3B-750-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5	2033.5
2.5°	2035.4	2042.2	2047.0	2052.8	2056.7	2062.4	2074.0	2080.8	2081.7	2086.5	2085.6
5°	2053.7	2063.3	2074.0	2089.4	2106.7	2121.1	2143.3	2158.8	2164.5	2169.3	2168.4
7.5°	2093.3	2106.7	2126.0	2152.9	2178.0	2197.3	2224.2	2242.5	2260.8	2267.6	2268.5
10°	2152.0	2171.3	2199.1	2235.8	2262.8	2287.8	2315.8	2331.2	2349.5	2357.2	2361.0
12.5°	2225.2	2245.5	2282.1	2333.1	2358.1	2375.4	2385.1	2381.3	2385.1	2391.8	2393.8
15°	2309.0	2331.2	2372.6	2427.5	2444.8	2429.5	2408.2	2389.0	2386.1	2387.9	2394.7
17.5°	2408.2	2424.6	2472.8	2519.0	2506.4	2442.9	2396.7	2365.8	2350.4	2345.6	2352.4
20°	2546.9	2546.9	2586.4	2615.3	2531.5	2423.6	2351.4	2301.3	2269.6	2256.0	2253.2
22.5°	2715.5	2700.1	2725.2	2704.9	2526.7	2369.7	2269.6	2182.8	2134.7	2115.4	2112.5
25°	2929.3	2911.1	2904.3	2779.1	2492.0	2284.0	2121.1	2016.2	1973.7	1963.2	1965.1
27.5°	3252.0	3205.8	3118.2	2819.6	2428.4	2149.1	1947.8	1850.4	1826.3	1827.4	1830.2
30°	3681.7	3589.2	3374.4	2826.3	2324.4	1958.4	1770.5	1701.2	1689.6	1694.4	1710.8
32.5°	4079.5	3991.9	3636.4	2795.5	2164.5	1771.5	1611.6	1565.4	1548.0	1553.8	1561.5
35°	4391.6	4367.5	3879.1	2752.1	1968.0	1596.1	1469.0	1429.6	1395.8	1388.1	1393.9
37.5°	4686.4	4676.8	4061.3	2691.4	1773.5	1471.9	1354.4	1302.4	1253.3	1226.3	1227.2
40°	5010.1	5000.5	4180.7	2598.0	1600.9	1364.0	1251.3	1183.0	1122.3	1073.1	1077.9
42.5°	5374.2	5317.4	4237.6	2464.1	1454.6	1272.5	1167.5	1075.0	995.1	949.8	952.7
45°	5772.0	5644.0	4236.5	2293.5	1331.3	1188.7	1077.9	946.9	872.8	830.4	828.4
47.5°	6194.0	5956.0	4184.6	2104.7	1211.9	1096.2	939.2	839.1	789.9	763.9	758.1
50°	6629.4	6247.9	4095.9	1888.0	1089.5	991.2	852.5	784.1	746.5	722.4	713.8
52.5°	7038.8	6512.7	3989.0	1642.4	965.2	889.1	814.0	761.0	721.5	694.5	683.0
55°	7419.3	6741.1	3837.7	1391.0	864.1	820.7	795.7	751.3	706.1	674.3	661.7
57.5°	7757.4	6889.4	3576.7	1155.0	791.8	773.6	776.4	735.0	683.0	656.0	638.7
60°	8038.7	6998.3	3190.4	936.3	733.1	727.2	746.5	704.2	643.5	612.6	599.2
62.5°	8207.2	6996.3	2716.5	766.8	683.0	684.9	707.0	665.6	604.0	575.1	566.4
65°	8192.7	6824.9	2196.3	656.0	634.8	636.7	665.6	623.2	571.2	553.9	552.9
67.5°	7902.9	6406.9	1684.8	583.7	581.8	590.5	624.2	594.4	551.0	549.1	552.0
70°	7117.7	5538.9	1213.7	525.9	527.0	539.5	583.7	576.0	540.4	544.3	543.2
72.5°	5707.5	4223.1	815.0	465.2	466.3	486.5	545.2	561.6	529.8	580.9	588.6
75°	3801.1	2633.6	524.0	400.8	401.7	427.7	511.5	533.6	500.9	578.9	583.7
77.5°	1826.3	1183.9	379.6	337.1	337.1	361.2	442.2	477.8	426.7	449.9	412.3
80°	631.0	445.1	298.6	271.6	265.9	282.3	372.8	414.2	368.0	339.1	317.9
82.5°	248.6	231.2	239.8	210.9	191.7	202.3	290.0	341.9	270.7	244.7	243.7
85°	142.6	150.3	169.5	139.7	110.8	124.2	212.9	245.6	204.2	180.1	184.0
87.5°	38.5	53.0	78.0	72.3	50.1	53.0	101.2	135.8	117.6	90.5	93.5
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)