

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: P967349

Luminaire Tested: **NAV-SB4D-830-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967349
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-830-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36710.4 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

Input Watts (W): 293.6
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



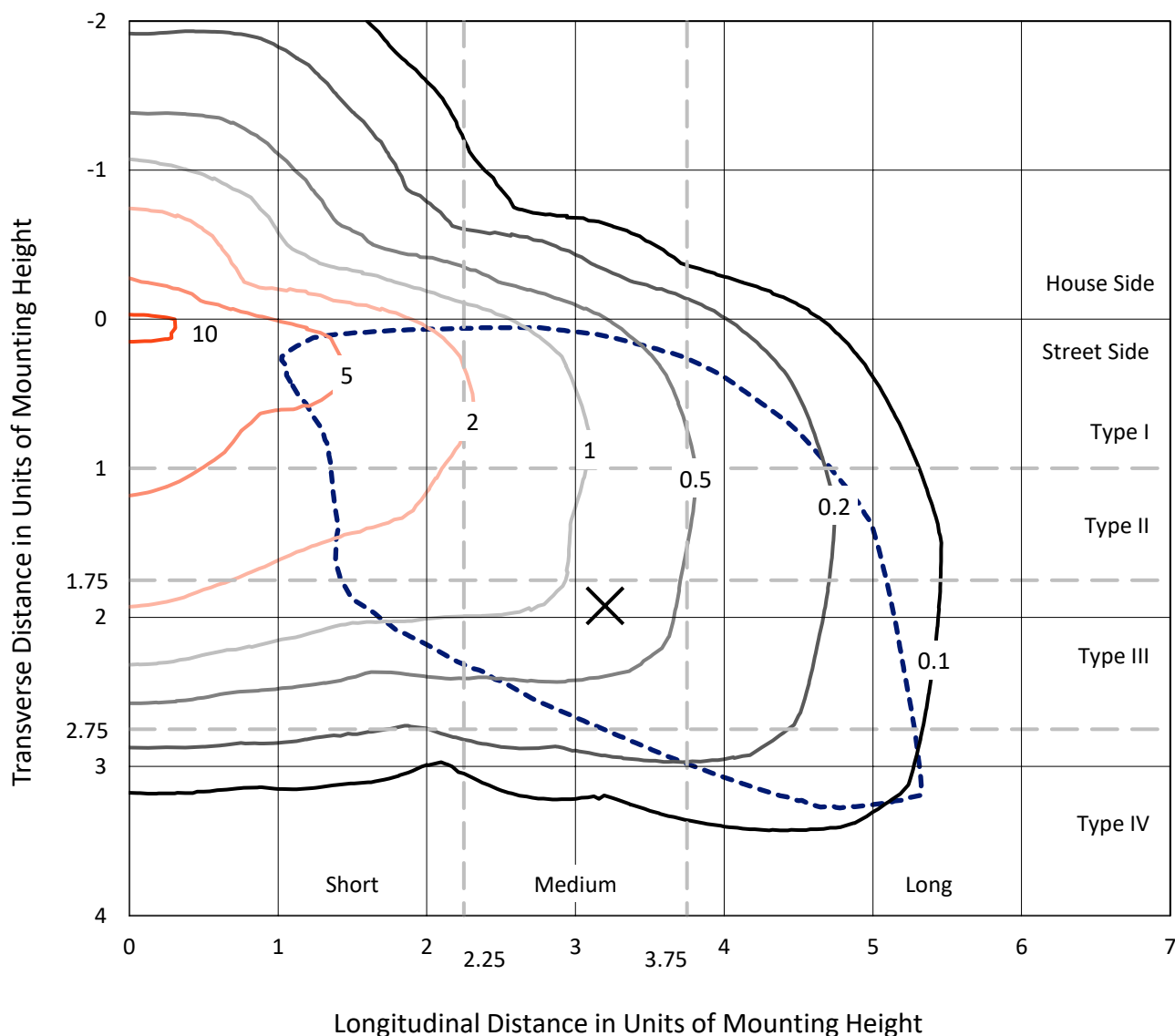
REPORT NUMBER: P967349

CATALOG NUMBER: NAV-SB4D-830-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

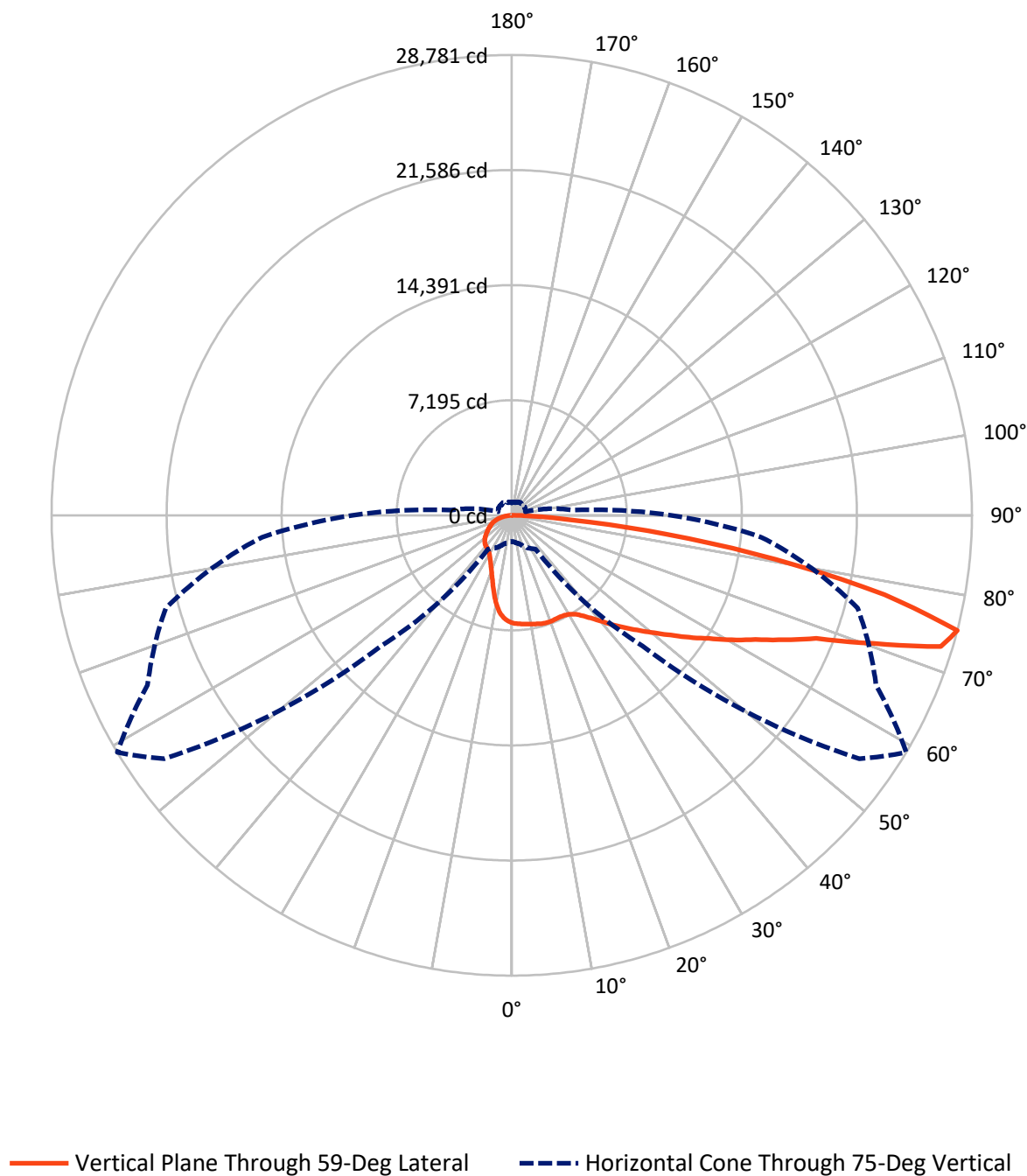


Based on 25 foot mounting height. Maximum calculated value = 10.8 fc
Type IV - Medium - N/A

REPORT NUMBER: P967349

CATALOG NUMBER: NAV-SB4D-830-U-SL3

Luminous Intensity Polar Plot



REPORT NUMBER: P967349

CATALOG NUMBER: NAV-SB4D-830-U-SL3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6885.3	0.0	6885.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	29825.1	0.0	29825.1
	% Fixture	81.2	0.0	81.2
Total	Lumens	36710.4	0.0	36710.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	604.2	1.6
10°-20°	1544.3	4.2
20°-30°	2345.7	6.4
30°-40°	3486.8	9.5
40°-50°	5185.5	14.1
50°-60°	7038.7	19.2
60°-70°	8593.1	23.4
70°-80°	6743.8	18.4
80°-90°	1168.2	3.2
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°	36710.4	100.0
0°-180°	36710.4	100.0

Coefficient of Utilization



REPORT NUMBER: P967349

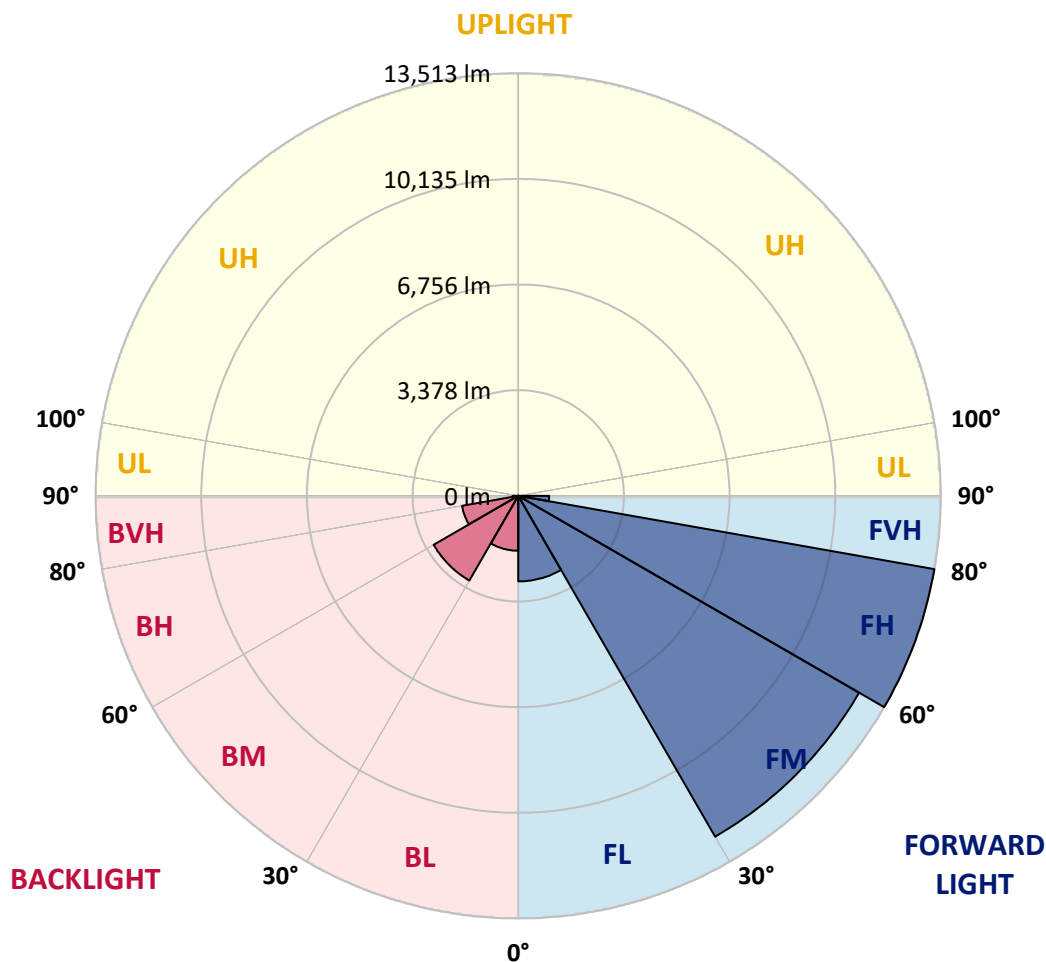
CATALOG NUMBER: NAV-SB4D-830-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2737.2	7.5			
FM	(30°-60°)	12585.8	34.3			
FH	(60°-80°)	13512.7	36.8			G5
FVH	(80°-90°)	989.4	2.7			G5
BL	(0°-30°)	1757.0	4.8	B3/2500		
BM	(30°-60°)	3125.2	8.5	B3/5000		
BH	(60°-80°)	1824.2	5.0	B3/2500		G3/2500
BVH	(80°-90°)	178.8	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-G5

Type IV Medium



REPORT NUMBER: P967349

CATALOG NUMBER: NAV-SB4D-830-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1
2.5°	6795.3	6771.7	6795.3	6785.5	6781.5	6773.6	6775.7	6789.5	6781.5	6791.4	6757.8
5°	6749.9	6736.1	6759.9	6753.9	6779.6	6783.6	6809.2	6825.0	6834.9	6836.9	6811.1
7.5°	6674.9	6661.1	6694.7	6722.4	6777.6	6793.4	6846.7	6872.4	6886.3	6909.9	6872.4
10°	6400.4	6394.5	6477.4	6582.1	6712.4	6793.4	6874.4	6917.8	6939.6	7002.7	6959.2
12.5°	5914.6	5922.6	6031.1	6232.5	6493.3	6753.9	6905.9	6969.2	7002.7	7081.7	7061.9
15°	5450.5	5448.6	5567.1	5782.3	6147.6	6580.1	6921.7	7030.4	7087.7	7204.2	7188.3
17.5°	5182.0	5174.0	5257.0	5420.9	5760.6	6313.5	6882.3	7064.0	7186.4	7332.5	7318.7
20°	5132.6	5116.8	5160.3	5241.2	5482.1	6021.3	6779.6	7064.0	7265.4	7454.9	7447.0
22.5°	5312.3	5286.6	5268.8	5259.0	5365.6	5780.3	6663.1	7040.2	7381.9	7630.7	7616.9
25°	5673.7	5634.2	5543.3	5454.4	5422.9	5671.7	6560.4	7034.4	7555.7	7867.7	7816.3
27.5°	6258.2	6208.8	6025.2	5812.0	5620.4	5727.0	6515.0	7069.8	7747.3	8118.5	8015.8
30°	6983.0	6929.6	6698.6	6370.8	6027.2	5932.4	6572.2	7174.6	7992.1	8452.3	8250.8
32.5°	7632.7	7573.4	7376.0	7042.3	6578.1	6287.9	6753.9	7374.0	8377.2	8916.4	8604.4
35°	8209.3	8140.2	7962.5	7654.4	7253.5	6787.4	7081.7	7727.5	8924.3	9670.8	9084.2
37.5°	8774.1	8693.2	8499.6	8173.8	7893.4	7453.0	7534.0	8181.8	9651.0	10587.0	9720.1
40°	9406.1	9289.6	9054.5	8732.7	8460.1	8233.0	8128.4	8738.6	10389.6	11610.0	10513.9
42.5°	10018.2	9907.8	9627.3	9352.8	9011.1	8946.0	8817.6	9390.3	11197.3	12733.7	11319.7
45°	10677.8	10545.6	10205.9	9858.3	9643.1	9420.0	9485.0	10042.0	11989.2	13879.1	12164.9
47.5°	11296.0	11147.9	10747.0	10360.0	10241.5	9818.9	10097.3	10758.8	12812.7	15040.2	13002.2
50°	11629.8	11483.6	11149.8	10800.3	10707.5	10310.6	10760.9	11546.8	13675.7	16197.6	13806.0
52.5°	11908.2	11750.2	11313.7	11120.2	11092.6	10845.7	11578.4	12447.3	14538.7	17220.5	14582.2
55°	12204.5	12028.7	11471.8	11298.0	11424.3	11446.1	12548.0	13468.3	15451.1	18217.7	15314.7
57.5°	12546.1	12323.0	11623.8	11448.0	11748.2	12149.1	13661.8	14526.8	16347.6	19142.0	15966.4
60°	12868.0	12642.9	11916.1	11687.0	12097.8	12964.7	14939.6	15808.5	17362.7	19965.5	16582.7
62.5°	12931.2	12745.6	12149.1	12147.2	12571.7	13916.6	16452.3	17102.0	18249.4	20779.1	17135.5
65°	11837.1	11720.6	11367.1	12129.3	13251.1	15287.2	18136.8	18756.9	19377.0	21490.0	17621.4
67.5°	9009.1	9024.9	8999.3	10470.6	12702.1	17256.1	20575.7	20528.3	20769.3	22287.9	18180.2
70°	4119.5	4212.3	4816.6	7227.9	10176.3	17483.1	24608.3	23994.1	22517.0	23320.7	18664.1
72.5°	2225.6	2296.7	2543.5	3501.4	6118.0	15543.8	27621.9	28058.4	24841.4	24015.9	18132.9
75°	1633.1	1672.7	1844.5	2225.6	2569.3	11552.8	26541.7	28781.1	25131.7	22394.5	15658.4
77.5°	1222.4	1240.1	1380.4	1763.5	1315.3	6090.3	21207.7	23836.2	21513.7	18399.5	11566.5
80°	886.7	906.4	1011.1	1323.2	922.3	2227.6	14562.4	16730.8	14734.2	11728.5	5764.5
82.5°	612.2	620.1	665.5	900.6	643.8	865.0	8262.6	9810.9	8225.1	4115.6	1556.2
85°	369.3	379.1	398.9	525.3	365.3	410.7	3566.5	3689.0	2458.7	983.5	483.8
87.5°	152.1	162.0	177.7	221.2	144.1	114.5	588.5	738.6	460.1	288.3	150.1
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: P967349

CATALOG NUMBER: NAV-SB4D-830-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1
2.5°	6748.0	6734.1	6696.6	6645.3	6597.9	6538.7	6513.0	6491.2	6471.5	6434.0	6416.2
5°	6789.5	6752.0	6651.2	6520.8	6372.7	6210.8	6052.8	5944.2	5851.4	5782.3	5725.0
7.5°	6852.6	6781.5	6597.9	6331.3	5991.6	5644.1	5330.1	5106.9	4939.1	4877.8	4771.2
10°	6917.8	6832.9	6513.0	6043.0	5456.5	4921.2	4504.6	4275.5	4141.2	4097.7	4030.6
12.5°	6994.8	6870.4	6380.6	5642.1	4858.1	4271.6	3908.2	3773.8	3704.8	3681.1	3687.0
15°	7107.4	6902.0	6181.2	5140.5	4287.4	3797.6	3562.6	3469.7	3434.3	3432.2	3440.1
17.5°	7192.3	6908.0	5871.2	4603.3	3849.0	3511.2	3317.7	3282.2	3305.8	3341.4	3355.2
20°	7287.1	6854.6	5464.4	4113.5	3540.9	3260.4	3179.4	3203.1	3260.4	3311.8	3329.5
22.5°	7354.3	6757.8	4972.6	3732.4	3274.3	3116.3	3112.3	3161.7	3193.3	3219.0	3232.7
25°	7413.5	6593.9	4451.3	3412.5	3055.0	3029.4	3072.8	3057.1	3035.3	3057.1	3070.9
27.5°	7457.0	6335.2	3985.2	3132.1	2901.1	2970.1	2944.4	2909.0	2906.9	2918.8	2938.6
30°	7443.1	5989.7	3602.1	2865.5	2792.4	2859.5	2798.4	2792.4	2786.5	2792.4	2814.1
32.5°	7443.1	5596.7	3307.9	2681.8	2723.3	2697.6	2691.6	2677.9	2654.1	2652.2	2677.9
35°	7484.6	5203.6	3055.0	2583.1	2666.0	2604.8	2608.7	2575.2	2525.8	2502.1	2525.8
37.5°	7569.5	4887.7	2804.3	2535.6	2565.3	2563.3	2547.5	2490.2	2403.3	2328.3	2354.0
40°	7774.9	4794.8	2632.4	2513.9	2517.9	2541.6	2500.2	2389.6	2192.1	2069.6	2085.5
42.5°	8096.8	4950.9	2594.9	2460.6	2486.3	2510.0	2429.0	2172.3	2032.1	1959.0	1959.0
45°	8505.6	5223.4	2675.9	2383.6	2411.3	2452.7	2211.8	2089.4	2026.2	2028.2	2038.0
47.5°	9023.0	5509.8	2826.0	2316.5	2302.7	2326.3	2067.6	1992.6	1905.7	1927.4	1982.8
50°	9621.4	5800.1	2968.2	2225.6	2182.2	2105.1	1974.9	1903.7	1793.1	1741.8	1755.6
52.5°	10269.1	6080.5	3025.4	2115.1	2051.8	1963.0	1911.6	1824.7	1690.4	1605.6	1603.5
55°	10883.2	6335.2	2962.2	1982.8	1921.5	1852.4	1844.5	1791.2	1647.0	1528.5	1528.5
57.5°	11463.9	6548.5	2804.3	1848.5	1789.2	1747.7	1801.0	1775.4	1593.7	1441.7	1433.8
60°	11955.6	6694.7	2575.2	1712.2	1670.7	1649.0	1730.0	1722.0	1518.6	1348.8	1342.9
62.5°	12346.6	6752.0	2322.4	1581.9	1571.9	1532.5	1631.2	1631.2	1423.8	1258.0	1252.0
65°	12652.7	6696.6	2065.7	1453.4	1473.2	1414.0	1510.7	1498.9	1323.2	1177.0	1169.1
67.5°	12923.3	6515.0	1781.2	1327.1	1372.5	1297.4	1384.4	1356.7	1212.6	1096.0	1088.1
70°	13043.7	6092.3	1457.4	1200.7	1256.0	1183.0	1258.0	1206.6	1088.1	1009.1	993.3
72.5°	12076.0	5063.5	1147.4	1068.4	1115.8	1056.6	1121.7	1062.4	953.9	918.3	888.7
75°	9990.7	3799.6	882.7	924.2	959.8	914.3	957.8	914.3	815.6	841.3	768.2
77.5°	7255.5	2565.3	675.4	772.1	787.9	764.2	801.8	752.5	663.6	657.6	628.0
80°	3608.0	1502.9	529.2	610.2	604.3	588.5	631.9	608.2	533.2	564.8	558.8
82.5°	1044.7	643.8	385.1	428.6	416.7	420.7	452.2	464.1	695.2	689.2	705.0
85°	327.8	252.8	231.0	238.9	227.1	233.0	266.6	529.2	489.7	286.4	310.1
87.5°	84.9	86.9	57.3	61.2	63.2	75.0	84.9	321.8	154.1	100.8	106.6
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)