

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: P964693

Luminaire Tested: **NAV-SB3C-827-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964693
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-827-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20399.5 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 149.1
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

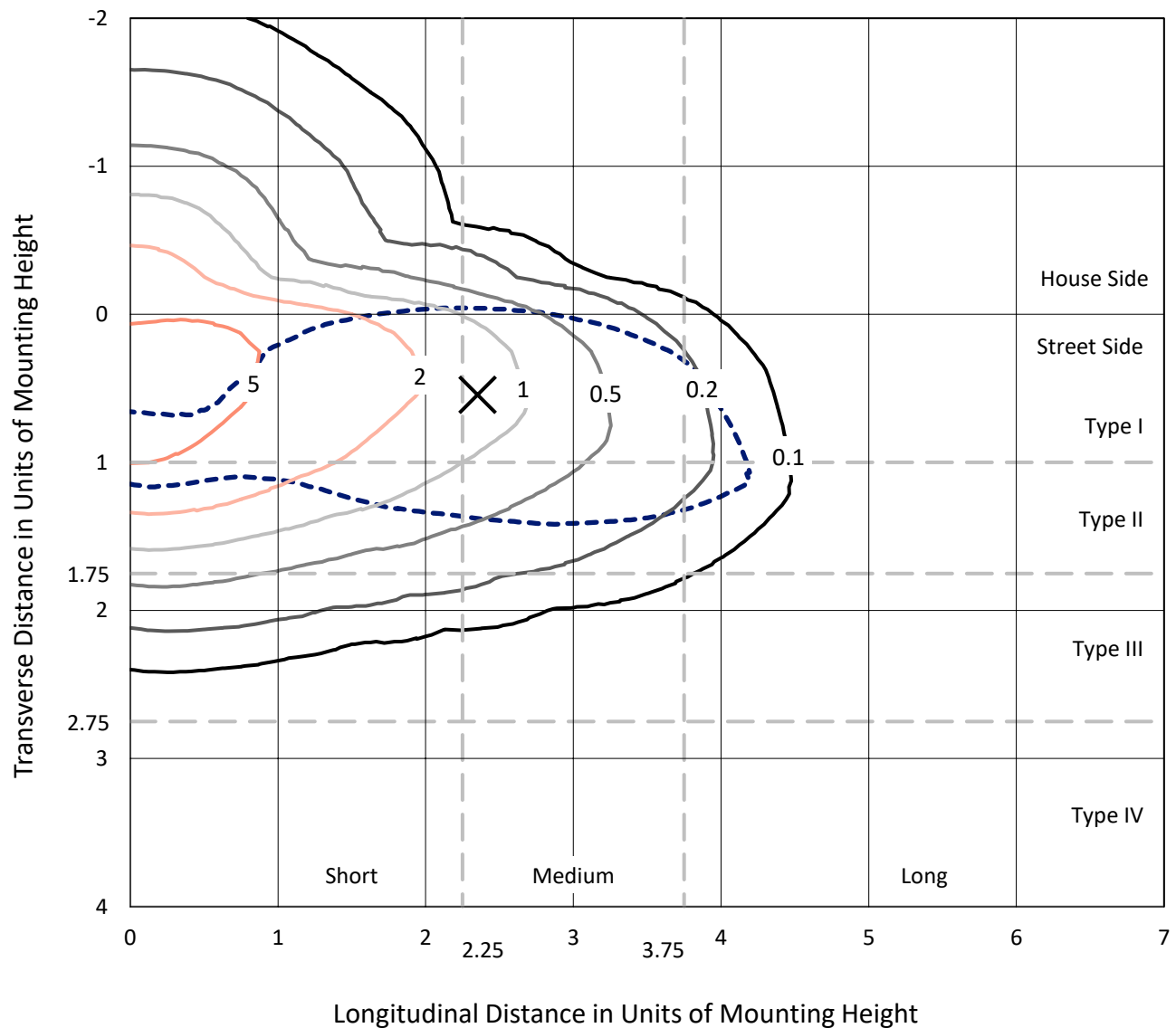


REPORT NUMBER: P964693

CATALOG NUMBER: NAV-SB3C-827-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

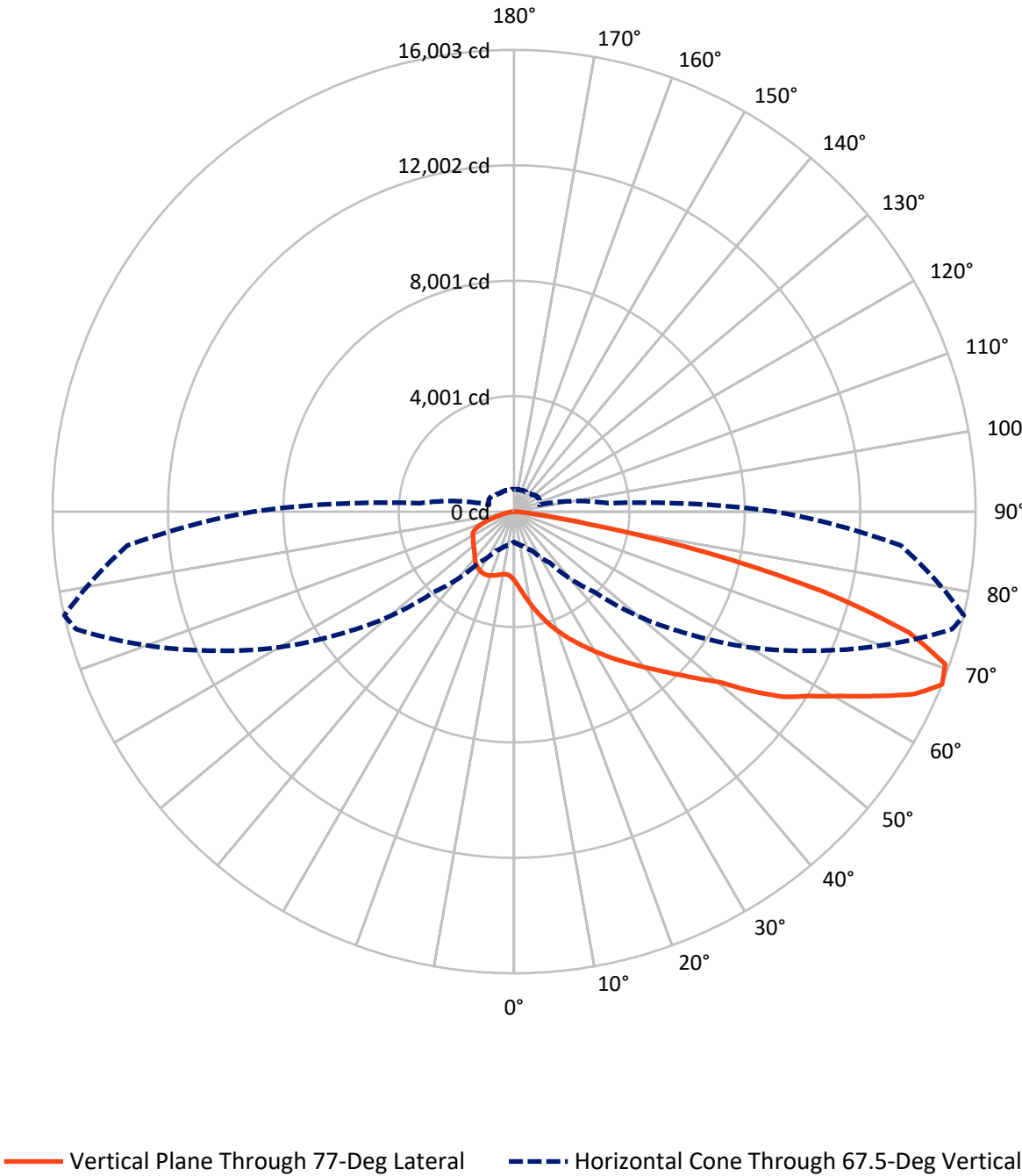
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
Type II - Medium - N/A

REPORT NUMBER: P964693
CATALOG NUMBER: NAV-SB3C-827-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P964693

CATALOG NUMBER: NAV-SB3C-827-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3858.8	0.0	3858.8
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	16540.8	0.0	16540.8
	% Fixture	81.1	0.0	81.1
Total	Lumens	20399.5	0.0	20399.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.6	1.3
10°-20°	921.7	4.5
20°-30°	1740.2	8.5
30°-40°	2803.5	13.7
40°-50°	3834.7	18.8
50°-60°	4325.5	21.2
60°-70°	4037.3	19.8
70°-80°	2213.1	10.8
80°-90°	267.0	1.3
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°	20399.5	100.0
0°-180°	20399.5	100.0

Coefficient of Utilization



REPORT NUMBER: P964693

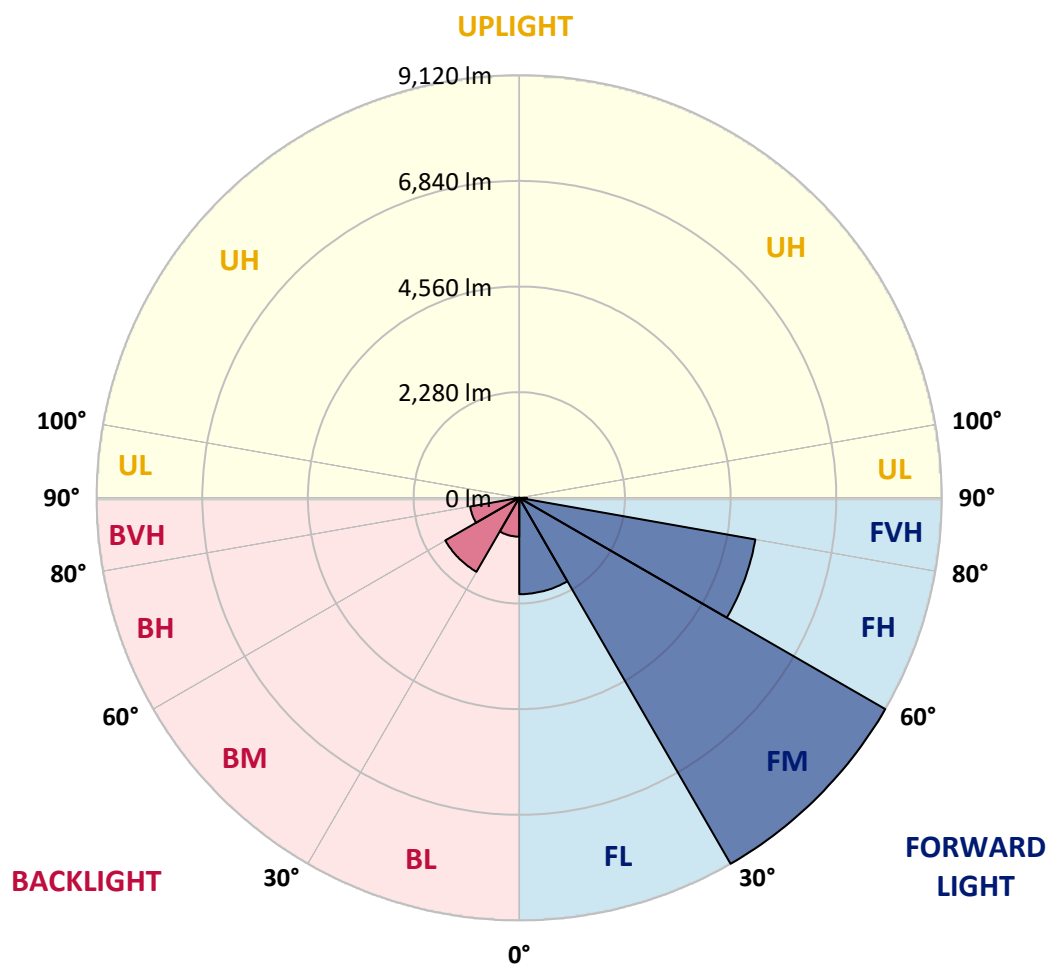
CATALOG NUMBER: NAV-SB3C-827-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2079.5	10.2			
FM	(30°-60°)	9120.4	44.7			
FH	(60°-80°)	5173.9	25.4			G3/7500
FVH	(80°-90°)	167.0	0.8			G2/225
BL	(0°-30°)	839.0	4.1	B2/1000		
BM	(30°-60°)	1843.2	9.0	B2/2500		
BH	(60°-80°)	1076.5	5.3	B3/2500		G3/2500
BVH	(80°-90°)	100.0	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-G3

Type II Medium



REPORT NUMBER: P964693

CATALOG NUMBER: NAV-SB3C-827-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5
2.5°	2996.9	3017.9	2991.6	2991.6	2903.2	2856.8	2768.4	2701.0	2579.9	2558.8	2478.8
5°	3542.3	3568.6	3531.8	3516.1	3411.8	3316.0	3167.5	3021.1	2805.2	2783.1	2594.6
7.5°	3964.6	3998.3	3965.6	3948.8	3856.2	3748.7	3575.0	3370.7	3066.4	3023.2	2750.5
10°	4308.9	4314.2	4303.7	4310.0	4237.3	4148.9	3971.0	3732.9	3352.8	3293.8	2939.0
12.5°	4503.7	4527.9	4549.1	4587.0	4574.3	4519.5	4359.4	4075.2	3656.1	3580.2	3144.3
15°	4595.4	4637.5	4684.9	4772.3	4842.8	4856.4	4734.4	4442.7	3964.6	3873.0	3351.7
17.5°	4628.0	4668.1	4742.8	4869.2	5020.8	5123.0	5068.1	4799.7	4269.9	4164.7	3569.8
20°	4793.3	4804.9	4850.2	4970.2	5134.5	5304.1	5345.1	5142.9	4572.2	4453.2	3795.1
22.5°	5147.1	5124.0	5136.6	5191.3	5309.3	5473.6	5567.3	5446.2	4882.8	4746.0	4022.5
25°	5731.6	5664.2	5596.8	5533.6	5593.6	5686.3	5792.6	5749.4	5208.2	5034.5	4252.1
27.5°	6469.7	6387.6	6239.1	6031.7	5959.0	5991.6	6039.0	6030.6	5509.4	5333.5	4489.0
30°	7196.3	7100.5	6923.6	6623.4	6431.8	6345.5	6309.7	6285.4	5836.9	5649.4	4728.0
32.5°	7776.5	7700.7	7527.0	7191.0	6913.0	6765.6	6646.6	6560.3	6179.1	5991.6	4980.8
35°	8284.0	8213.5	8014.5	7648.0	7345.9	7188.9	7033.0	6848.8	6535.0	6345.5	5252.4
37.5°	8747.3	8676.8	8404.1	8022.9	7718.6	7610.1	7471.1	7158.4	6892.0	6712.9	5539.9
40°	9040.1	9024.3	8769.5	8337.8	8021.9	7968.1	7921.8	7517.5	7288.0	7121.5	5855.8
42.5°	9114.9	9149.7	8947.4	8592.6	8291.4	8248.3	8356.7	7924.0	7732.3	7573.3	6213.9
45°	8934.8	9034.9	8902.2	8661.0	8483.1	8459.9	8742.1	8368.3	8224.1	8078.7	6645.6
47.5°	8478.9	8648.4	8593.6	8560.0	8534.7	8634.7	9081.2	8840.0	8781.1	8654.7	7138.4
50°	7558.6	7879.7	7975.5	8188.2	8432.6	8770.5	9389.7	9355.0	9431.8	9304.4	7738.6
52.5°	5967.4	6409.7	6965.7	7498.5	8118.7	8725.3	9728.8	10094.2	10418.5	10349.0	8692.6
55°	4926.0	5125.0	5552.5	6529.8	7510.1	8534.7	9881.5	10691.3	11397.8	11335.7	9416.1
57.5°	4125.7	4303.7	4566.9	5383.0	6589.7	8101.9	9976.2	11055.5	12068.6	12062.3	10130.0
60°	3267.5	3456.0	3725.6	4303.7	5514.6	7354.3	9955.2	11470.5	12924.7	12977.3	11000.8
62.5°	2298.8	2506.1	2805.2	3344.4	4416.3	6385.4	9525.5	11770.6	13932.4	14075.6	12048.6
65°	1511.1	1648.0	1873.3	2338.7	3290.7	5139.8	8705.2	11809.5	15010.7	15252.9	13032.1
67.5°	1059.3	1112.0	1244.7	1497.4	2169.2	3941.4	7398.4	11406.2	15730.0	16002.6	13458.6
70°	826.7	852.9	920.3	1021.4	1362.6	2650.4	5669.4	10357.4	15576.2	15860.5	13013.2
72.5°	713.9	739.2	764.4	777.2	914.0	1636.4	3840.4	8660.0	14128.3	14321.0	11314.7
75°	647.6	653.9	675.0	670.8	697.1	1061.4	2216.6	6309.7	11147.2	11080.9	8352.5
77.5°	544.4	552.8	587.6	582.3	619.2	725.5	1151.0	4072.0	7226.9	6776.2	4649.1
80°	461.2	465.5	503.4	497.0	538.1	525.4	587.6	2075.5	3065.4	2596.7	1340.5
82.5°	160.1	197.9	384.4	396.0	410.7	318.1	339.1	846.6	936.1	717.1	281.2
85°	77.9	83.2	195.9	278.0	277.0	160.1	165.3	302.2	294.9	231.6	93.7
87.5°	12.6	15.8	23.2	108.4	86.3	42.1	56.9	58.9	61.1	52.7	21.0
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: P964693

CATALOG NUMBER: NAV-SB3C-827-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5	2393.5
2.5°	2419.8	2367.1	2256.6	2154.4	2074.4	1997.5	1954.4	1917.6	1896.5	1892.3	1892.3
5°	2485.1	2376.7	2175.6	2006.0	1895.4	1813.3	1770.1	1742.7	1729.1	1720.7	1719.5
7.5°	2578.8	2419.8	2133.4	1940.7	1824.9	1765.9	1743.8	1739.6	1738.5	1739.6	1742.7
10°	2708.4	2490.3	2129.2	1925.0	1828.0	1795.4	1794.4	1795.4	1799.6	1800.6	1801.7
12.5°	2848.4	2563.0	2146.0	1938.6	1868.1	1850.1	1846.9	1845.9	1849.1	1851.2	1852.3
15°	3001.1	2658.8	2174.4	1968.1	1912.2	1893.3	1890.2	1883.8	1882.8	1881.7	1880.7
17.5°	3158.0	2753.7	2206.1	1999.7	1940.7	1914.4	1902.8	1888.0	1876.5	1873.3	1876.5
20°	3317.0	2847.3	2228.1	2015.5	1942.8	1906.0	1882.8	1857.5	1837.5	1825.9	1830.1
22.5°	3486.5	2945.2	2241.9	2011.3	1923.8	1873.3	1831.2	1801.7	1771.2	1751.2	1752.2
25°	3651.9	3030.6	2240.9	1989.1	1887.0	1822.8	1769.0	1731.1	1689.0	1668.0	1668.0
27.5°	3810.8	3107.5	2214.5	1950.2	1834.3	1762.8	1698.5	1653.2	1612.1	1592.1	1591.1
30°	3975.2	3171.7	2173.4	1893.3	1772.2	1693.2	1622.7	1583.7	1546.8	1528.0	1526.8
32.5°	4138.3	3230.7	2115.5	1822.8	1700.6	1624.8	1555.3	1519.5	1497.4	1497.4	1498.4
35°	4311.0	3271.7	2038.6	1740.7	1624.8	1552.2	1497.4	1476.3	1474.3	1461.5	1458.5
37.5°	4493.2	3298.0	1944.9	1656.4	1550.0	1481.6	1464.7	1439.5	1418.4	1391.0	1386.8
40°	4684.9	3324.4	1832.3	1569.0	1471.1	1433.2	1425.8	1392.1	1332.1	1264.6	1255.2
42.5°	4917.5	3342.2	1715.3	1481.6	1387.8	1375.2	1385.8	1327.9	1232.0	1181.5	1182.5
45°	5187.1	3371.7	1607.9	1395.2	1302.6	1302.6	1346.8	1271.0	1192.0	1160.4	1165.7
47.5°	5536.7	3440.2	1507.9	1300.5	1223.6	1244.7	1260.4	1202.5	1158.4	1119.4	1118.3
50°	6042.2	3604.5	1404.8	1204.7	1163.6	1205.7	1183.6	1149.8	1098.3	1066.7	1063.5
52.5°	6669.8	3701.4	1313.1	1118.3	1112.0	1154.1	1122.5	1090.9	1052.0	1009.8	1001.4
55°	7097.3	3719.2	1236.3	1055.1	1077.3	1073.1	1061.4	1033.0	1012.0	956.1	957.1
57.5°	7575.4	3755.1	1173.0	1017.2	1055.1	1008.8	1004.6	980.3	952.9	915.1	902.4
60°	8147.2	3810.8	1118.3	1002.4	1036.2	966.7	945.6	936.1	908.8	889.8	895.0
62.5°	8770.5	3861.4	1062.5	1004.6	1014.0	925.6	894.0	890.8	874.0	867.7	867.7
65°	9196.0	3723.4	993.0	1002.4	979.3	883.4	843.5	842.4	828.7	826.7	825.5
67.5°	9047.5	3286.5	899.2	973.0	943.5	841.3	797.1	792.9	775.0	776.0	776.0
70°	8304.0	2663.1	769.8	900.4	899.2	803.5	748.7	735.0	710.7	715.0	719.2
72.5°	6909.8	1973.3	596.0	779.2	828.7	768.7	692.9	670.8	640.2	644.4	643.4
75°	4990.2	1341.5	433.9	592.9	721.3	727.6	638.2	600.2	563.3	569.7	571.7
77.5°	2553.6	760.2	319.1	408.6	566.5	661.3	588.7	538.1	529.6	588.7	580.3
80°	832.9	381.2	221.1	286.4	371.7	541.2	516.0	458.1	455.9	469.7	403.3
82.5°	248.6	161.1	142.2	188.5	205.3	414.9	445.5	346.4	298.0	313.8	324.3
85°	85.3	77.9	81.1	93.7	97.9	243.2	311.7	229.6	216.9	239.0	235.9
87.5°	20.0	27.4	23.2	21.0	21.0	58.9	121.1	95.8	132.6	88.5	85.3
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)