

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: STREETWORKS

Report Number: P967840

Luminaire Tested: **NVN-SB5A-827-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967840
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB5A-827-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20540 lumens
Efficiency: N/A
Efficacy: 145.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

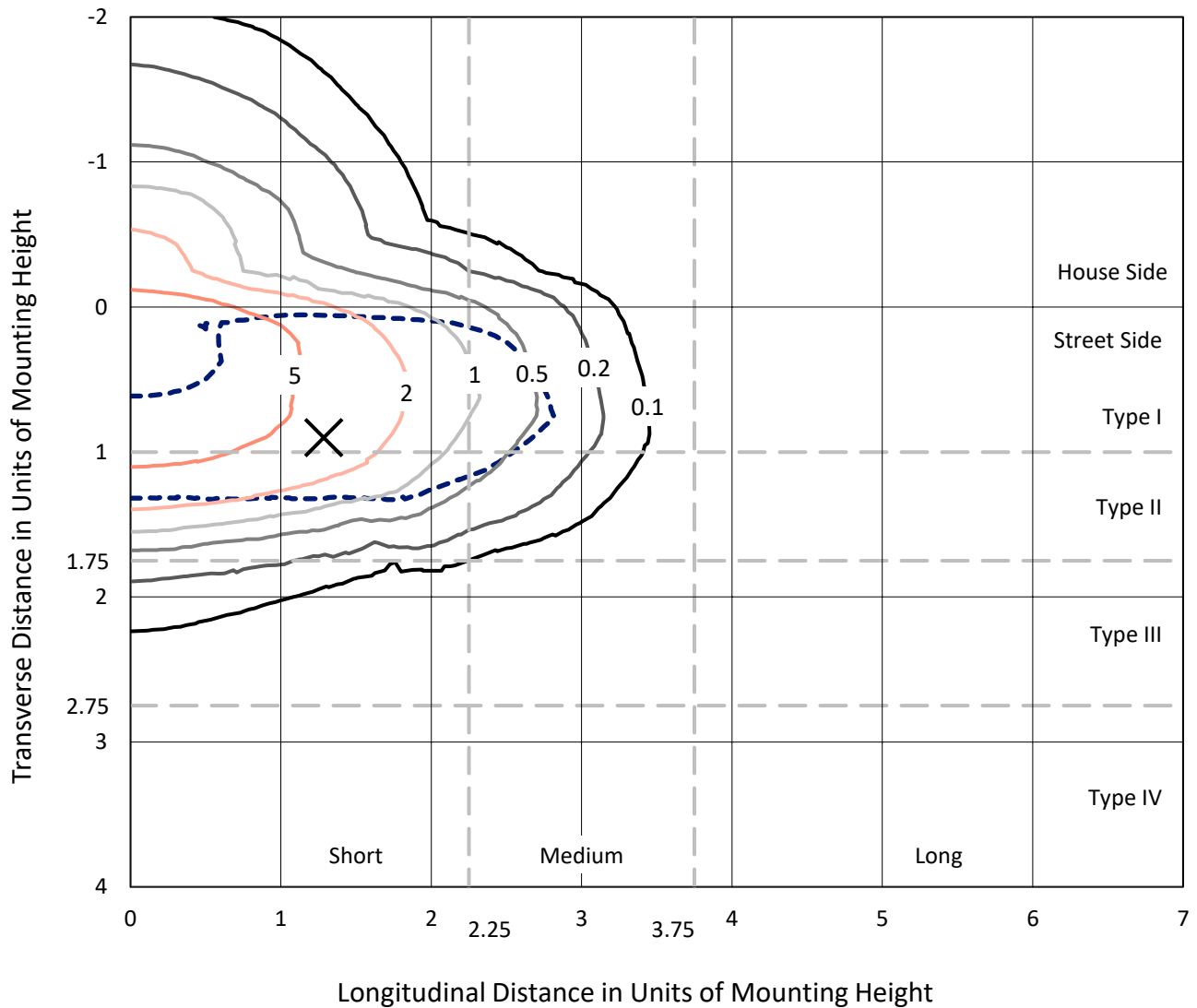
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

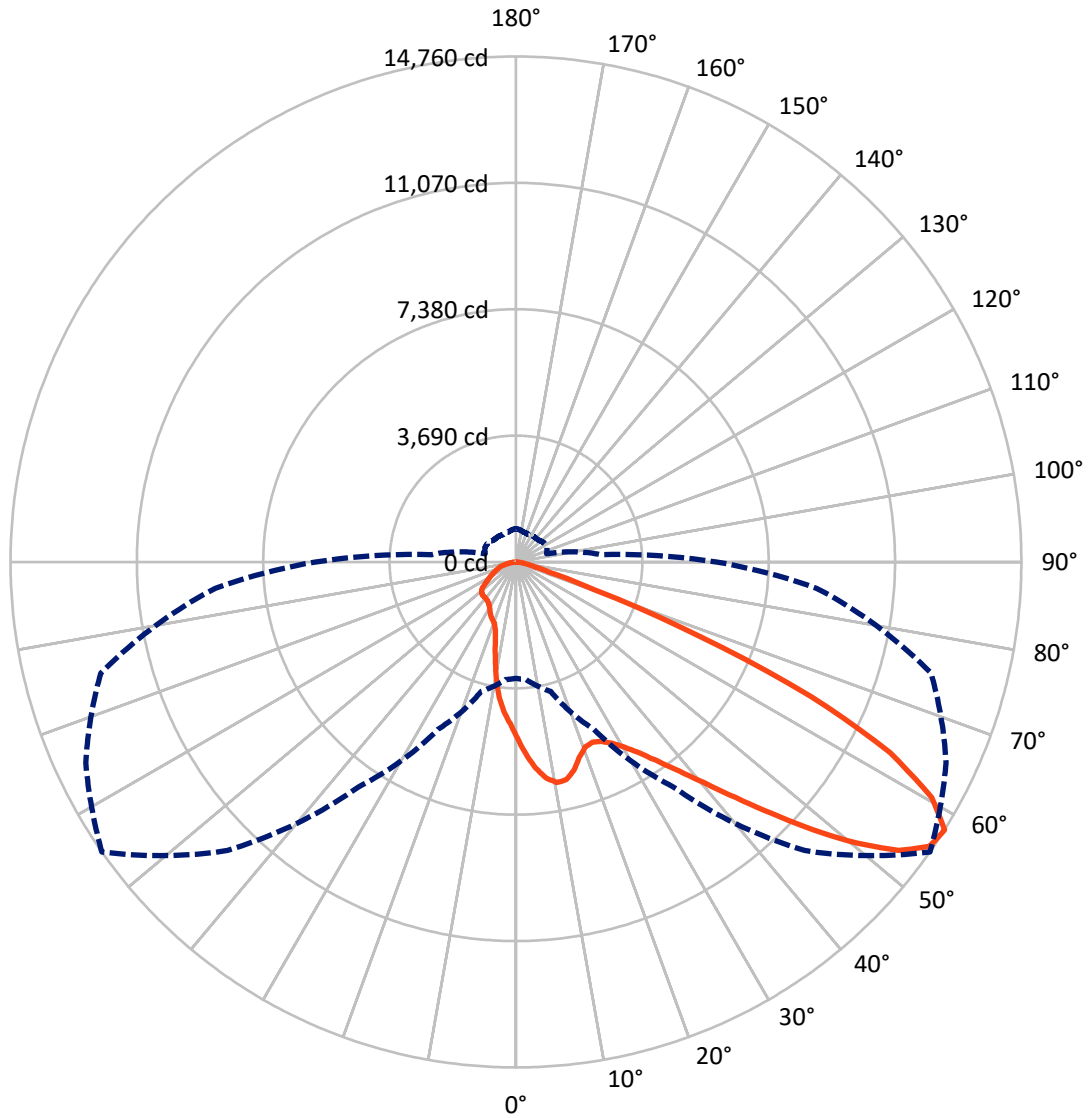
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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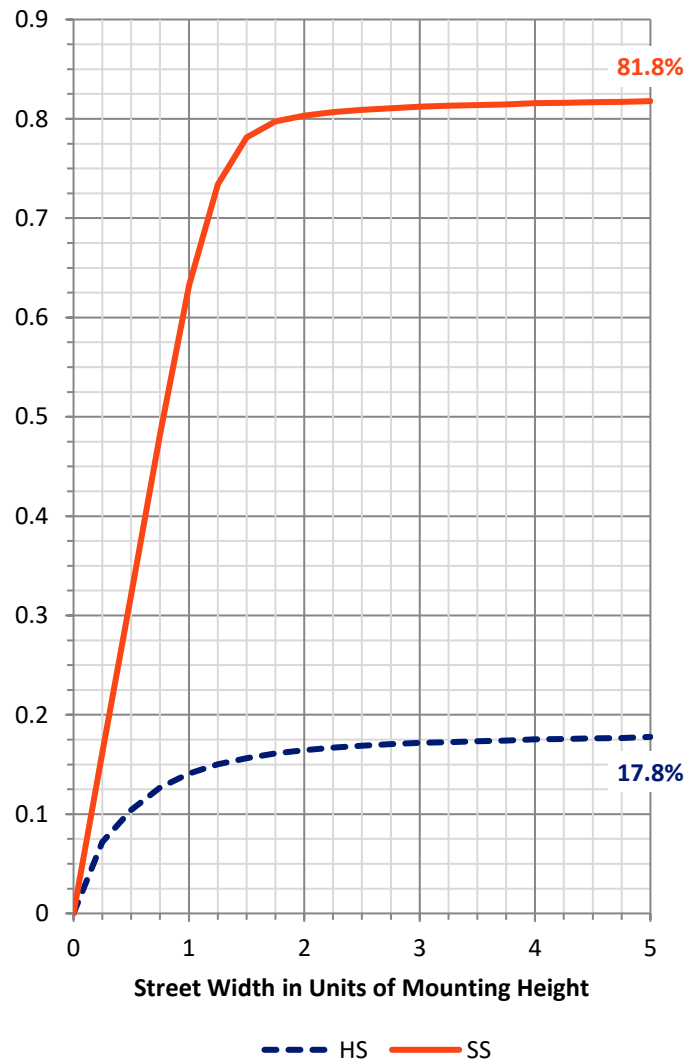
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3716.6	0.0	3716.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	16823.4	0.0	16823.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	20540.0	0.0	20540.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	477.6	2.3
10°-20°	1205.4	5.9
20°-30°	1923.5	9.4
30°-40°	3045.4	14.8
40°-50°	4661.3	22.7
50°-60°	4992.7	24.3
60°-70°	3140.9	15.3
70°-80°	928.8	4.5
80°-90°	164.2	0.8
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°	20540.0	100.0
0°-180°	20540.0	100.0



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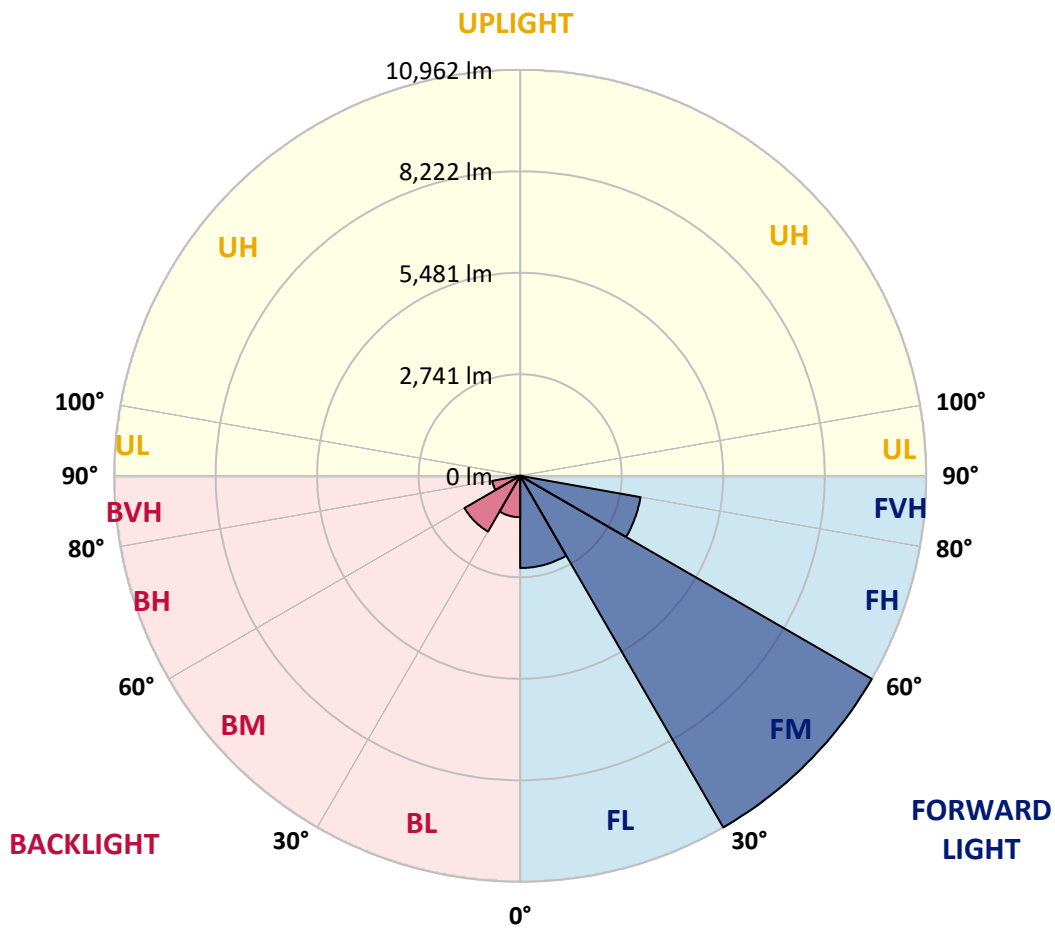
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2489.4	12.1			
FM (30°-60°)	10962.3	53.4			
FH (60°-80°)	3302.2	16.1			G2/5000
FVH (80°-90°)	69.4	0.3			G1/100
BL (0°-30°)	1117.1	5.4	B3/2500		
BM (30°-60°)	1737.1	8.5	B2/2500		
BH (60°-80°)	767.6	3.7	B2/1000		G2/1000
BVH (80°-90°)	94.8	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6
2.5°	5904.8	5900.5	5923.9	5844.2	5790.1	5716.8	5620.2	5497.1	5364.3	5224.1	5163.6
5°	6436.8	6399.6	6424.0	6364.5	6305.1	6194.7	6051.3	5850.6	5605.3	5326.1	5177.5
7.5°	6352.8	6327.4	6390.1	6443.2	6487.7	6473.9	6368.8	6158.6	5842.2	5436.5	5220.9
10°	5676.4	5647.9	5736.0	5919.7	6189.4	6424.0	6551.5	6420.8	6084.2	5557.5	5263.5
12.5°	5079.8	5066.0	5124.4	5273.0	5572.4	6022.7	6528.1	6650.2	6335.9	5700.9	5320.8
15°	4824.9	4808.0	4845.1	4920.5	5111.6	5531.0	6315.7	6807.3	6583.3	5866.6	5412.1
17.5°	4768.6	4749.5	4765.4	4804.8	4927.9	5247.5	5995.0	6884.8	6841.4	6051.3	5488.6
20°	4872.7	4856.8	4858.9	4856.8	4942.8	5196.5	5772.1	6855.1	7066.5	6221.2	5562.9
22.5°	5124.4	5097.8	5098.9	5042.6	5089.3	5285.7	5713.7	6775.5	7267.1	6369.9	5619.2
25°	5534.2	5486.4	5495.9	5352.7	5339.9	5485.4	5805.0	6713.9	7466.7	6488.8	5629.8
27.5°	6094.9	6040.7	6012.0	5798.6	5696.6	5768.9	5990.8	6735.2	7655.7	6591.8	5603.3
30°	6795.6	6729.8	6671.4	6368.8	6184.0	6157.5	6279.7	6875.3	7878.8	6700.1	5557.5
32.5°	7654.7	7578.2	7472.0	7070.7	6810.5	6671.4	6653.4	7124.8	8139.9	6838.1	5534.2
35°	8677.2	8577.4	8426.6	7907.4	7578.2	7293.7	7146.1	7484.8	8497.8	7046.3	5560.7
37.5°	9730.5	9618.0	9479.9	8861.9	8457.4	8037.9	7747.1	7973.3	8974.5	7328.6	5630.8
40°	10702.1	10575.7	10447.3	9897.2	9463.0	8957.6	8482.9	8591.2	9557.5	7666.4	5749.7
42.5°	11275.5	11182.0	11133.2	10835.9	10500.4	9987.5	9398.2	9323.8	10212.6	8055.0	5885.7
45°	11250.0	11211.8	11362.5	11485.7	11406.1	11121.6	10470.6	10134.1	10869.9	8391.6	6011.0
47.5°	10649.0	10674.5	11011.1	11703.4	12008.2	12156.8	11691.8	10929.4	11441.2	8643.2	6067.3
50°	9013.8	9035.1	9814.4	11307.4	12163.2	13001.0	12903.2	11705.5	11884.0	8797.2	6054.5
52.5°	7719.5	7733.2	8067.7	10132.9	11651.4	13425.7	13994.8	12437.1	12207.7	8839.7	5983.3
55°	5814.5	5862.3	6237.1	7949.9	10319.8	13089.0	14659.6	13191.0	12412.6	8843.9	5909.0
57.5°	3396.7	3448.8	3911.7	5396.2	8021.0	11915.7	14760.4	13859.9	12551.8	8810.0	5864.4
60°	1663.9	1686.1	1887.9	2836.2	4945.9	9655.2	13949.1	14183.8	12629.3	8791.8	5862.3
62.5°	1121.2	1118.1	1126.6	1399.4	2436.8	6203.2	12258.7	13616.8	12587.9	8722.9	5841.1
65°	964.1	952.4	920.6	982.2	1262.5	2837.2	9471.4	11924.2	12272.5	8549.8	5695.6
67.5°	833.5	834.6	835.7	816.5	901.5	1309.2	5788.0	9392.9	11140.6	7730.0	5134.9
70°	690.2	699.8	704.0	704.0	734.8	859.1	2470.9	6437.8	8787.6	6060.9	4135.8
72.5°	628.6	608.4	610.6	599.9	599.9	654.1	995.0	3649.5	5536.3	3409.6	2524.0
75°	512.9	525.6	527.8	520.3	495.9	499.1	590.4	1531.1	2368.9	1414.4	1247.6
77.5°	442.8	442.8	447.0	441.7	422.6	373.7	393.9	593.6	806.0	579.7	623.3
80°	355.7	354.6	372.7	383.3	353.6	276.0	251.6	328.1	357.8	254.8	323.9
82.5°	173.1	183.7	255.9	292.0	268.7	199.7	154.0	203.9	191.2	112.5	145.4
85°	100.9	95.5	114.7	162.5	154.0	110.4	74.3	106.2	99.8	57.3	58.4
87.5°	31.9	29.7	23.4	55.2	44.6	30.7	20.2	30.7	27.6	12.7	12.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6
2.5°	5088.2	4962.9	4838.7	4725.1	4656.1	4611.5	4566.9	4517.0	4497.9	4469.2
5°	5037.3	4795.2	4579.6	4393.9	4224.9	4092.3	3958.4	3850.2	3801.3	3834.2
7.5°	5007.5	4657.2	4324.8	3984.0	3655.9	3393.6	3165.3	3005.0	2932.7	2950.8
10°	4981.0	4501.1	3994.5	3456.2	2984.8	2659.9	2426.3	2304.2	2258.5	2268.0
12.5°	4956.6	4325.9	3596.4	2888.1	2387.0	2172.5	2105.6	2106.7	2115.2	2121.5
15°	4952.3	4114.6	3151.5	2391.2	2064.1	2050.4	2122.6	2168.3	2192.7	2200.1
17.5°	4945.9	3861.9	2698.1	2052.5	1985.6	2079.0	2145.9	2175.7	2194.8	2195.9
20°	4920.5	3541.2	2279.7	1891.1	1968.6	2049.3	2090.7	2114.1	2130.1	2135.3
22.5°	4841.9	3184.4	1953.8	1818.9	1900.7	1965.4	2014.2	2040.8	2050.4	2056.8
25°	4700.6	2785.1	1728.7	1749.9	1806.2	1887.9	1927.2	1932.5	1929.4	1938.9
27.5°	4515.9	2357.3	1588.4	1656.4	1728.7	1798.8	1820.0	1816.8	1810.5	1821.0
30°	4292.9	1972.8	1499.3	1551.3	1650.0	1713.8	1732.9	1725.5	1712.7	1724.4
32.5°	4057.3	1658.6	1426.0	1478.0	1585.3	1648.0	1667.1	1659.6	1650.0	1659.6
35°	3837.4	1438.8	1358.0	1429.3	1534.3	1595.9	1620.3	1621.4	1621.4	1633.1
37.5°	3635.7	1310.3	1301.8	1398.4	1499.3	1554.5	1589.6	1591.6	1546.0	1549.2
40°	3448.8	1256.1	1276.3	1378.2	1465.3	1518.4	1520.5	1401.6	1317.7	1315.6
42.5°	3295.9	1245.5	1283.7	1376.2	1440.8	1443.0	1293.3	1200.9	1177.5	1178.6
45°	3152.6	1242.3	1300.7	1376.2	1404.8	1246.6	1145.7	1121.2	1123.4	1131.9
47.5°	2992.2	1229.6	1303.9	1357.0	1300.7	1108.5	1078.8	1068.2	1063.9	1066.1
50°	2817.0	1184.0	1263.5	1318.8	1122.4	1049.1	1011.9	1008.7	1014.0	1017.2
52.5°	2632.3	1109.6	1194.5	1249.8	1040.6	997.0	955.6	963.1	986.5	993.8
55°	2511.2	1022.5	1103.2	1111.7	983.3	948.2	913.2	930.2	973.6	987.5
57.5°	2479.4	930.2	999.2	989.6	910.0	905.7	884.5	899.3	954.6	974.8
60°	2469.8	847.4	897.3	889.8	838.9	859.1	853.7	861.1	880.3	886.6
62.5°	2395.4	781.5	806.0	795.3	775.1	810.2	822.9	807.0	821.8	829.3
65°	2206.4	728.4	716.7	709.3	717.8	749.7	775.1	743.2	757.1	778.3
67.5°	1894.3	656.2	624.3	632.8	659.4	676.4	709.3	673.2	684.9	721.0
70°	1532.2	564.9	536.2	560.7	586.1	621.2	626.5	602.1	629.7	670.0
72.5°	1084.1	472.5	452.3	502.2	510.8	556.4	544.7	533.0	571.2	585.1
75°	751.7	381.2	369.5	407.7	438.5	477.9	469.3	483.1	563.9	570.2
77.5°	475.7	296.2	288.8	313.2	355.7	399.2	413.1	570.2	963.1	1001.3
80°	276.0	220.9	212.4	231.4	268.7	309.0	398.2	699.8	635.0	627.5
82.5°	154.0	151.8	141.2	146.6	179.5	222.9	562.7	492.7	400.3	413.1
85°	72.2	89.2	76.5	73.3	100.9	261.2	375.9	281.4	186.9	182.7
87.5°	19.1	17.0	17.0	19.1	42.4	225.1	149.8	120.0	71.1	69.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)