

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: P965756

Luminaire Tested: **NVN-SB4A-827-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB4A-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15837.3 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

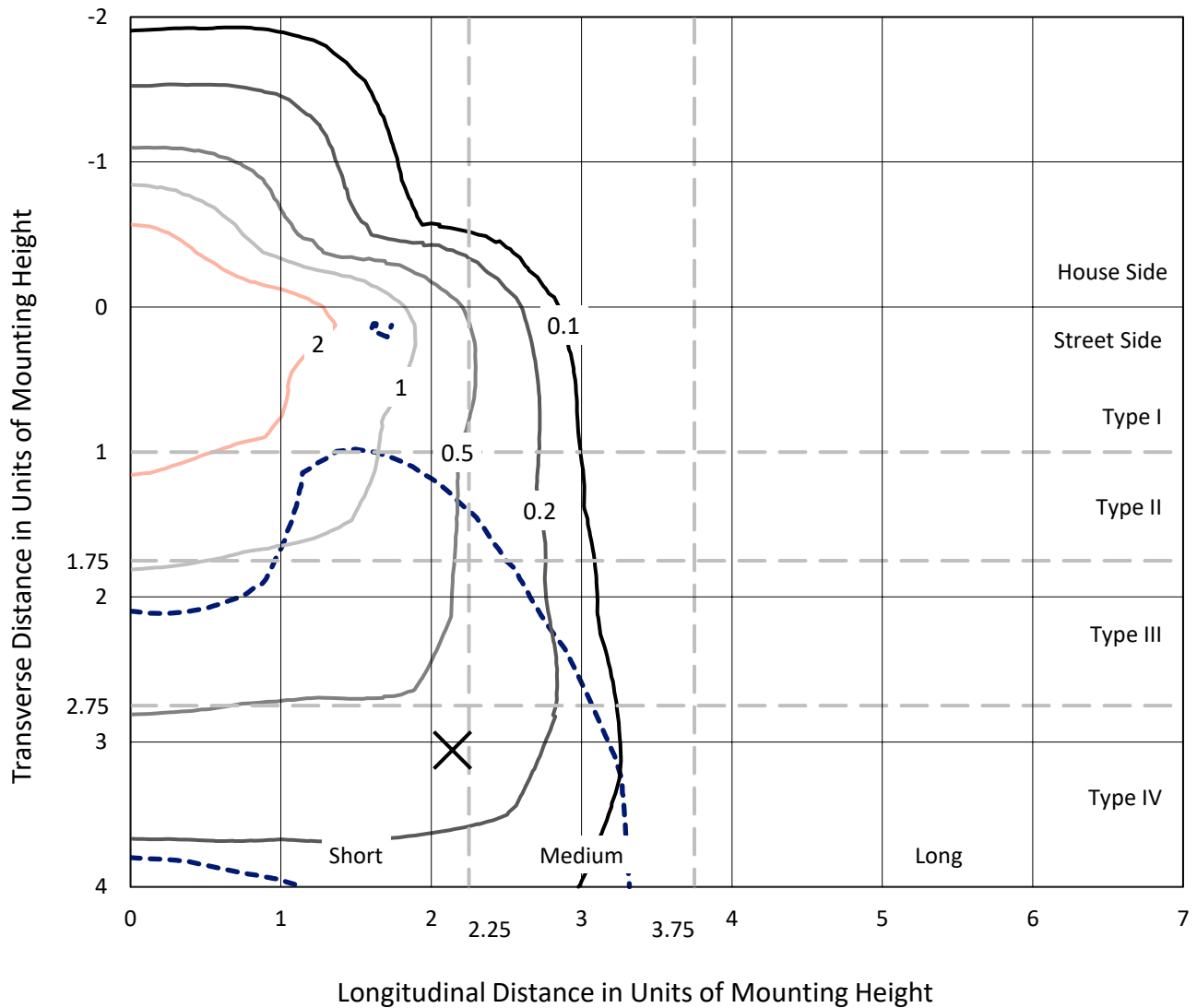
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

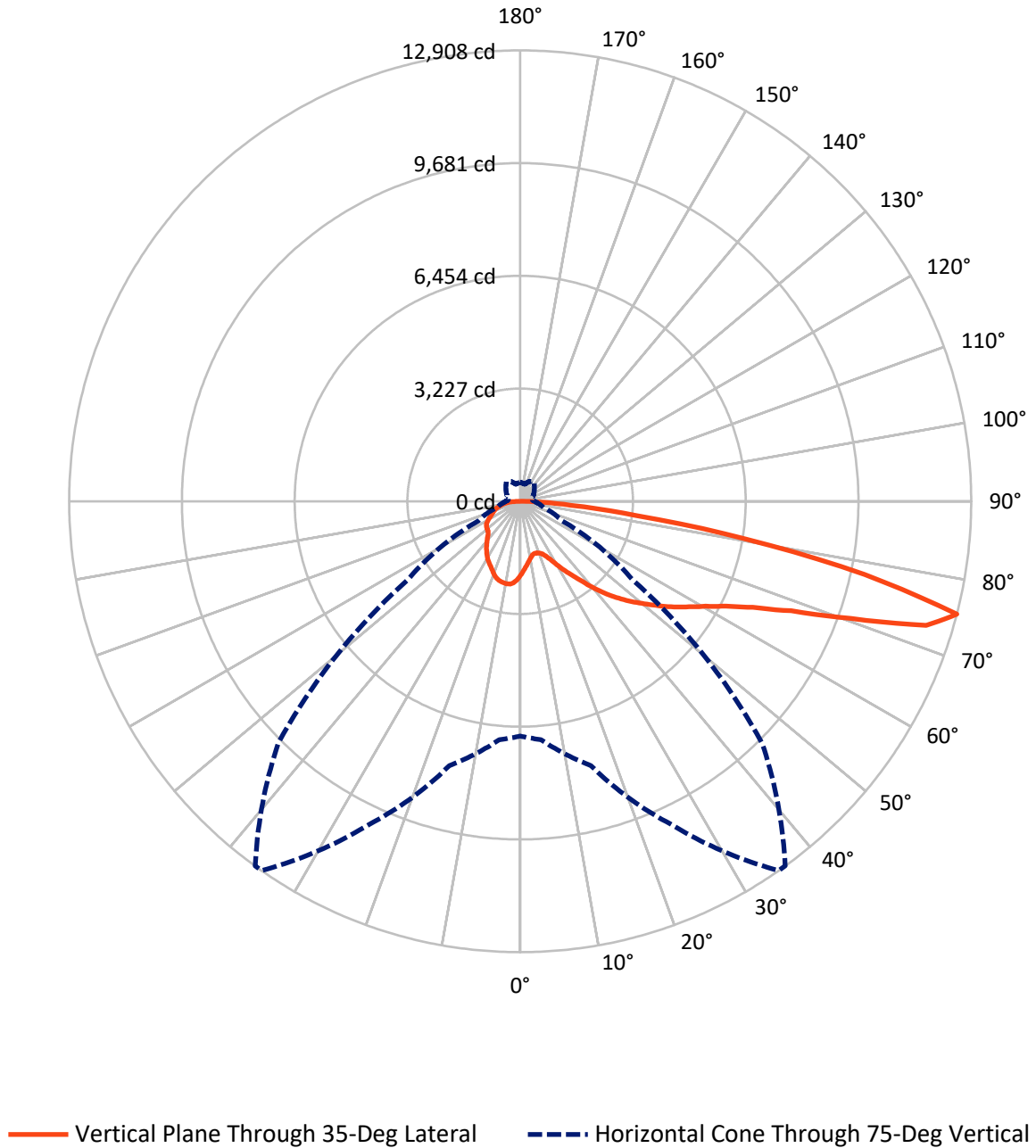
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3768.9	0.0	3768.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	12068.4	0.0	12068.4
	% Fixture	76.2	0.0	76.2
Total	Lumens	15837.3	0.0	15837.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.8	1.3
10°-20°	576.4	3.6
20°-30°	967.8	6.1
30°-40°	1504.2	9.5
40°-50°	2232.6	14.1
50°-60°	3082.2	19.5
60°-70°	3739.4	23.6
70°-80°	3090.4	19.5
80°-90°	444.5	2.8
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°	15837.3	100.0
0°-180°	15837.3	100.0

Coefficient of Utilization



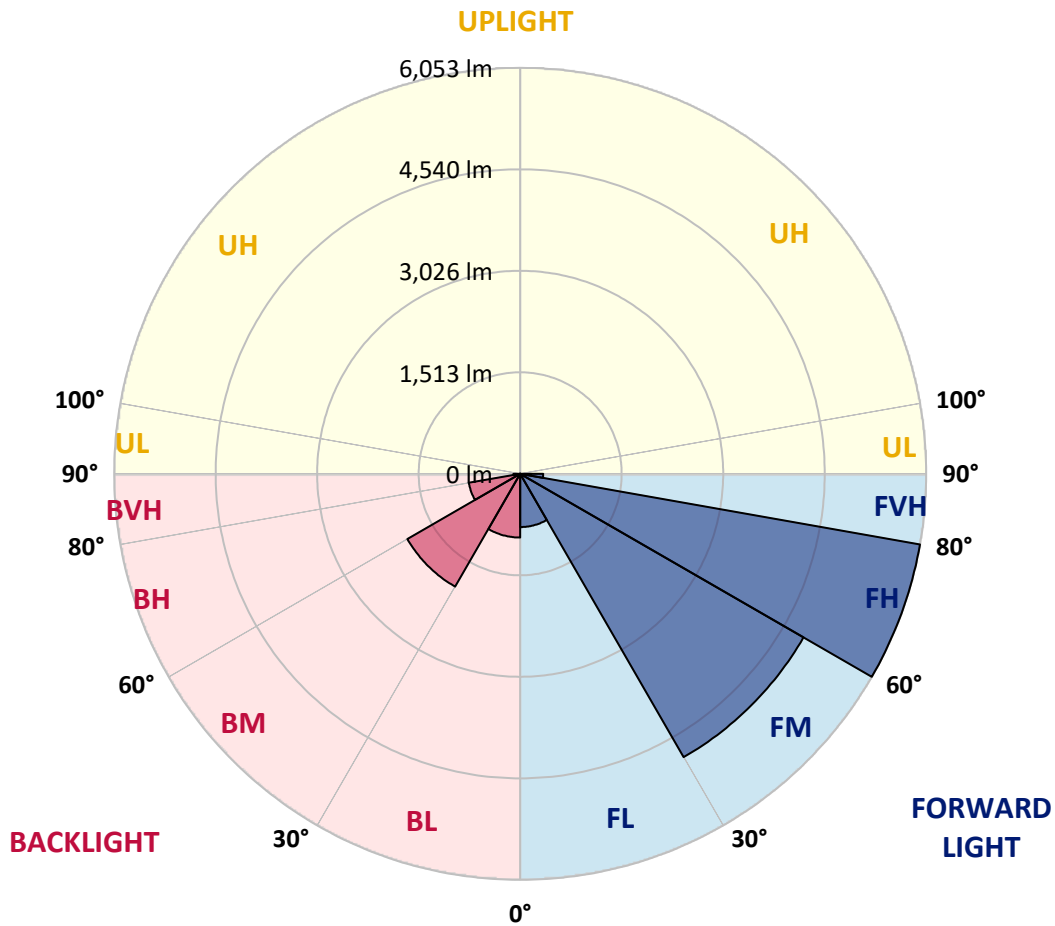
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	794.2	5.0			
FM (30°-60°)	4877.0	30.8			
FH (60°-80°)	6052.8	38.2			G3/7500
FVH (80°-90°)	344.4	2.2			G3/500
BL (0°-30°)	949.8	6.0	B2/1000		
BM (30°-60°)	1942.0	12.3	B2/2500		
BH (60°-80°)	777.0	4.9	B2/1000		G2/1000
BVH (80°-90°)	100.1	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5
2.5°	1946.1	1958.1	1963.2	1960.6	1973.4	1971.7	1989.7	2012.0	2042.8	2072.8	2116.4
5°	1796.2	1809.0	1820.2	1830.4	1855.2	1863.0	1891.2	1934.1	1990.5	2048.0	2119.8
7.5°	1656.7	1667.8	1684.9	1703.8	1745.7	1753.4	1800.5	1867.2	1946.1	2029.9	2129.2
10°	1542.8	1553.9	1571.9	1593.3	1645.5	1655.0	1714.9	1803.9	1906.7	2012.8	2139.5
12.5°	1494.0	1497.4	1507.7	1529.1	1574.5	1580.4	1646.4	1748.2	1868.2	2000.0	2155.0
15°	1491.4	1498.2	1499.2	1510.2	1548.0	1550.5	1611.3	1712.3	1844.2	1997.4	2178.0
17.5°	1517.1	1522.2	1514.5	1521.4	1553.1	1557.4	1605.3	1695.1	1836.5	2008.6	2217.5
20°	1585.6	1589.9	1566.8	1557.4	1580.4	1583.9	1631.0	1706.3	1844.2	2031.7	2271.4
22.5°	1731.1	1733.7	1677.2	1638.7	1640.4	1642.2	1683.2	1751.7	1874.1	2073.6	2339.9
25°	1958.1	1956.3	1866.4	1791.9	1749.2	1739.7	1767.1	1825.3	1924.6	2129.2	2428.0
27.5°	2223.4	2210.6	2120.7	2009.4	1916.0	1902.4	1896.4	1921.3	1996.6	2202.9	2536.0
30°	2523.1	2511.1	2414.4	2268.8	2139.5	2117.2	2060.8	2048.0	2103.6	2303.1	2685.8
32.5°	2851.9	2844.2	2728.5	2552.2	2379.2	2353.6	2258.6	2224.2	2267.9	2454.6	2894.7
35°	3127.6	3120.7	3024.8	2843.2	2631.8	2600.1	2503.4	2464.9	2487.2	2648.9	3167.8
37.5°	3376.7	3373.3	3291.1	3148.1	2929.8	2891.2	2782.5	2769.7	2765.3	2905.0	3499.1
40°	3607.8	3599.3	3513.7	3438.4	3276.5	3241.4	3145.5	3134.3	3101.9	3220.0	3874.1
42.5°	3863.8	3841.6	3717.5	3682.3	3638.6	3609.5	3552.2	3553.9	3482.0	3575.3	4271.4
45°	4072.7	4059.9	3932.3	3911.8	3958.9	3946.9	3996.6	4009.4	3869.8	3947.7	4684.0
47.5°	4297.0	4285.0	4177.2	4162.6	4290.2	4293.6	4469.1	4473.4	4248.2	4334.7	5097.5
50°	4573.5	4556.4	4449.4	4467.5	4610.4	4623.3	4944.3	4915.2	4596.7	4727.7	5507.6
52.5°	4755.9	4766.2	4743.1	4772.2	4967.5	4979.4	5411.8	5337.3	4941.7	5115.6	5910.0
55°	4890.4	4910.9	4982.8	5049.6	5344.1	5356.1	5852.6	5738.8	5227.7	5475.1	6288.5
57.5°	5063.3	5034.2	5168.6	5298.7	5702.0	5733.6	6281.6	6125.8	5481.1	5785.0	6547.9
60°	5311.5	5291.0	5395.5	5588.1	6102.6	6153.2	6735.4	6474.2	5666.9	6030.8	6598.4
62.5°	5815.0	5763.7	5779.9	5950.3	6607.8	6674.6	7247.4	6778.2	5759.4	6126.6	6327.8
65°	6567.6	6479.4	6397.2	6515.3	7319.3	7385.2	7825.3	7017.0	5725.1	5940.9	5609.5
67.5°	7515.3	7428.0	7327.0	7438.3	8367.2	8419.5	8538.5	7151.4	5455.5	5225.1	4339.8
70°	8297.0	8264.5	8385.2	8843.2	10041.0	10042.7	9452.9	7040.2	4716.5	3704.6	2511.1
72.5°	8193.4	8173.8	8809.9	10225.9	12150.6	12105.1	10318.4	6197.7	3177.2	1671.3	941.0
75°	6721.6	6849.3	7834.7	10201.1	12908.2	12902.3	9788.4	3940.0	1314.2	692.6	486.3
77.5°	3604.4	3806.4	5086.5	7531.6	10077.0	10228.5	6881.7	1378.4	564.2	443.5	336.5
80°	1175.5	1351.9	2027.3	3834.7	6547.9	6519.6	2949.4	541.1	386.1	314.2	232.9
82.5°	499.2	519.7	905.8	1810.8	3360.5	3308.2	939.2	310.8	271.4	214.9	143.8
85°	195.2	218.3	399.9	837.3	1455.5	1423.8	339.1	154.1	173.8	140.4	85.6
87.5°	64.2	77.9	143.0	286.8	452.9	436.6	83.0	53.1	75.3	64.2	30.9
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5	2110.5
2.5°	2128.4	2142.1	2158.3	2182.3	2202.9	2220.0	2238.0	2249.2	2253.4	2266.3	2265.4
5°	2143.8	2173.8	2214.0	2253.4	2291.9	2315.1	2335.6	2345.9	2355.2	2362.1	2363.9
7.5°	2169.5	2208.1	2271.4	2322.8	2355.2	2374.1	2387.8	2384.4	2387.8	2389.5	2392.1
10°	2191.8	2245.7	2321.0	2369.8	2394.7	2395.5	2392.1	2380.2	2374.1	2374.9	2376.7
12.5°	2218.3	2278.3	2359.5	2400.7	2407.5	2388.7	2374.1	2353.6	2345.9	2342.4	2340.7
15°	2254.3	2322.8	2401.5	2417.0	2399.8	2375.8	2351.0	2317.6	2300.5	2286.8	2291.1
17.5°	2297.9	2373.3	2434.1	2422.9	2386.1	2346.7	2306.5	2255.9	2220.9	2206.3	2207.1
20°	2358.7	2426.4	2458.9	2410.1	2354.4	2294.5	2226.0	2164.4	2131.8	2117.2	2115.6
22.5°	2432.3	2497.4	2482.9	2387.8	2309.0	2213.2	2127.6	2082.2	2065.9	2055.6	2057.4
25°	2520.5	2576.1	2500.0	2355.2	2234.6	2105.2	2039.3	2024.8	2017.1	2009.4	2009.4
27.5°	2635.3	2665.2	2512.8	2307.4	2118.2	1990.5	1966.6	1969.1	1966.6	1953.8	1956.3
30°	2786.8	2780.8	2524.8	2229.5	1984.6	1886.9	1888.7	1899.8	1901.5	1893.0	1897.3
32.5°	2986.2	2925.5	2530.8	2128.4	1857.0	1796.2	1798.0	1809.9	1818.5	1803.9	1810.8
35°	3227.7	3094.2	2521.4	2001.7	1758.6	1709.7	1696.9	1700.4	1702.9	1689.2	1698.6
37.5°	3509.4	3283.4	2479.5	1861.3	1677.2	1624.9	1597.6	1574.5	1560.8	1548.0	1556.5
40°	3818.4	3489.7	2402.4	1724.3	1586.5	1535.0	1494.0	1450.4	1404.0	1386.9	1394.7
42.5°	4142.1	3702.0	2309.0	1593.3	1482.0	1440.0	1396.4	1333.0	1263.7	1228.6	1232.9
45°	4477.7	3919.5	2217.5	1464.0	1374.9	1357.0	1306.5	1230.3	1155.0	1110.5	1107.0
47.5°	4806.4	4124.9	2083.0	1333.9	1274.8	1294.5	1255.1	1184.9	1101.1	1030.8	1023.2
50°	5120.7	4317.6	1863.0	1202.0	1193.5	1275.7	1238.0	1136.9	1041.1	951.2	943.5
52.5°	5432.3	4473.4	1581.4	1082.2	1149.8	1270.5	1215.8	1104.4	987.2	893.0	882.7
55°	5696.8	4553.9	1309.9	979.5	1086.5	1226.8	1189.2	1065.9	910.9	810.8	802.3
57.5°	5847.5	4488.8	1083.9	878.4	999.2	1155.0	1143.8	983.7	820.2	743.1	732.9
60°	5782.4	4225.2	898.9	790.3	916.0	1077.1	1065.1	902.4	750.8	678.0	667.8
62.5°	5423.8	3722.6	752.6	713.2	840.7	997.4	986.3	839.9	697.7	627.6	616.4
65°	4701.2	3028.3	638.7	648.9	764.5	901.5	917.8	787.7	655.8	587.3	576.2
67.5°	3585.6	2193.5	549.6	593.3	690.0	807.4	854.4	750.0	620.7	555.7	545.4
70°	2043.6	1245.7	474.3	539.4	624.1	720.1	805.6	720.1	583.0	529.1	522.2
72.5°	774.8	571.9	410.1	485.4	560.8	646.4	751.7	672.9	539.4	499.2	492.3
75°	413.5	348.5	345.0	422.1	488.0	574.5	684.1	626.7	506.9	527.4	544.5
77.5°	281.7	246.6	288.5	361.3	408.4	494.9	612.1	556.5	439.2	437.5	403.2
80°	195.2	174.7	234.6	291.1	315.9	416.0	534.2	477.8	357.8	333.9	319.4
82.5°	117.3	113.9	175.5	217.5	223.4	321.0	442.6	400.7	292.8	255.1	256.9
85°	64.2	67.6	112.1	127.6	130.2	224.3	346.8	310.0	225.2	189.2	191.0
87.5°	17.9	23.2	41.1	50.5	62.5	116.4	206.3	184.1	113.1	78.7	78.7
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)