

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: P882591

Luminaire Tested: **NAV-SB2C-740-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882591
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-740-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16264 lumens
Efficiency: N/A
Efficacy: 161.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

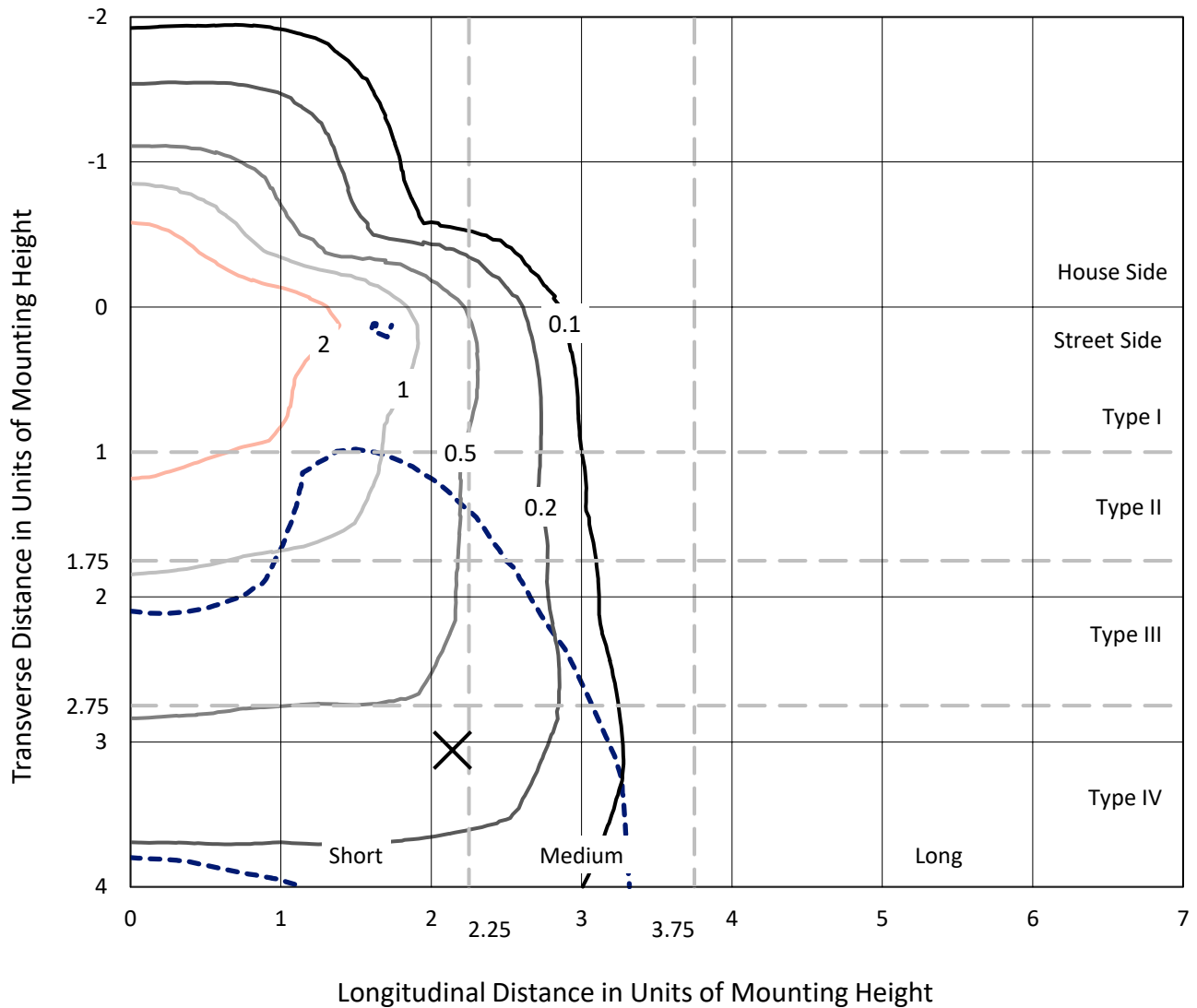
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882591
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Iso-Footcandle Lines of Horizontal Illumination

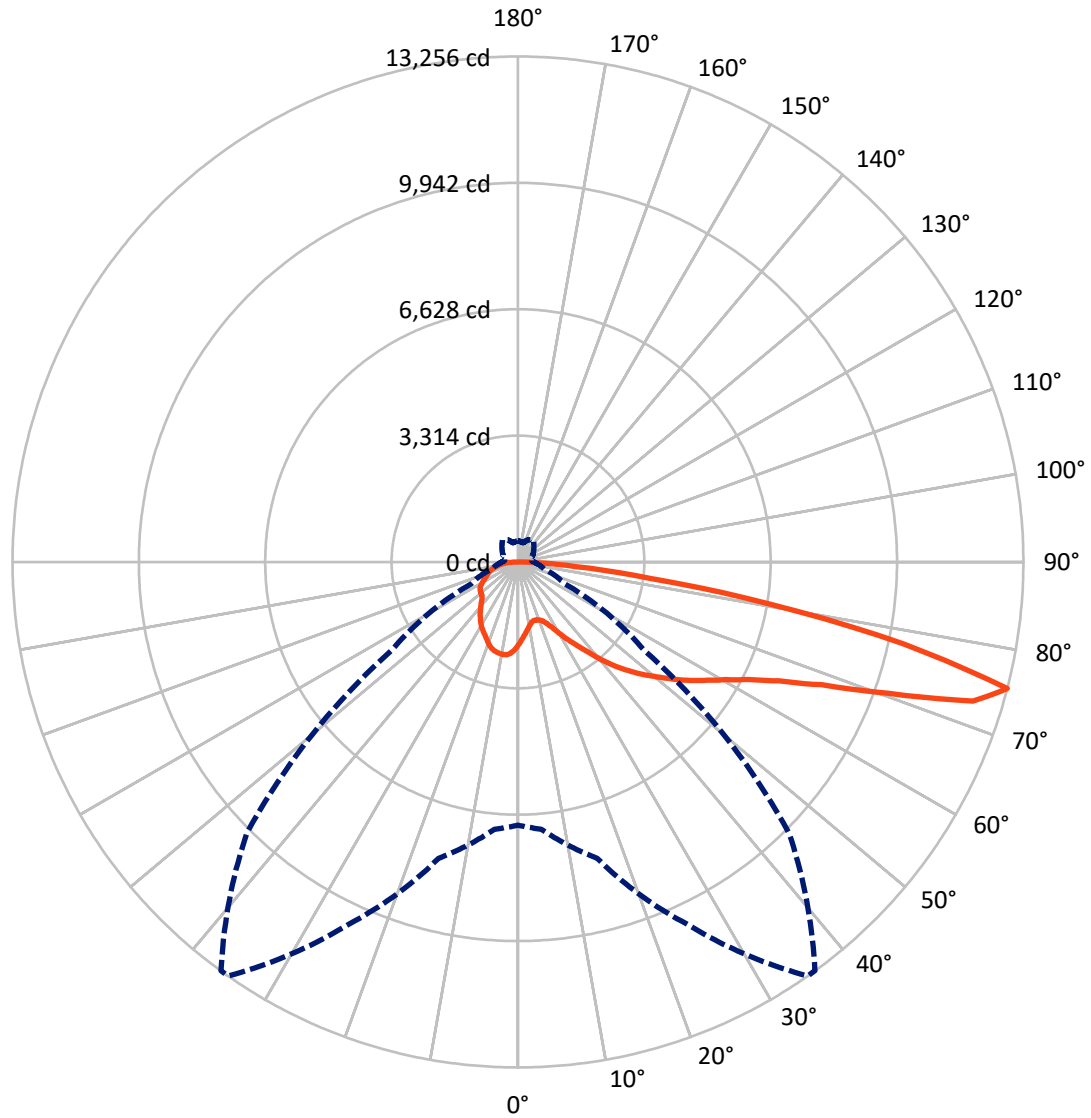
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P882591
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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P882591

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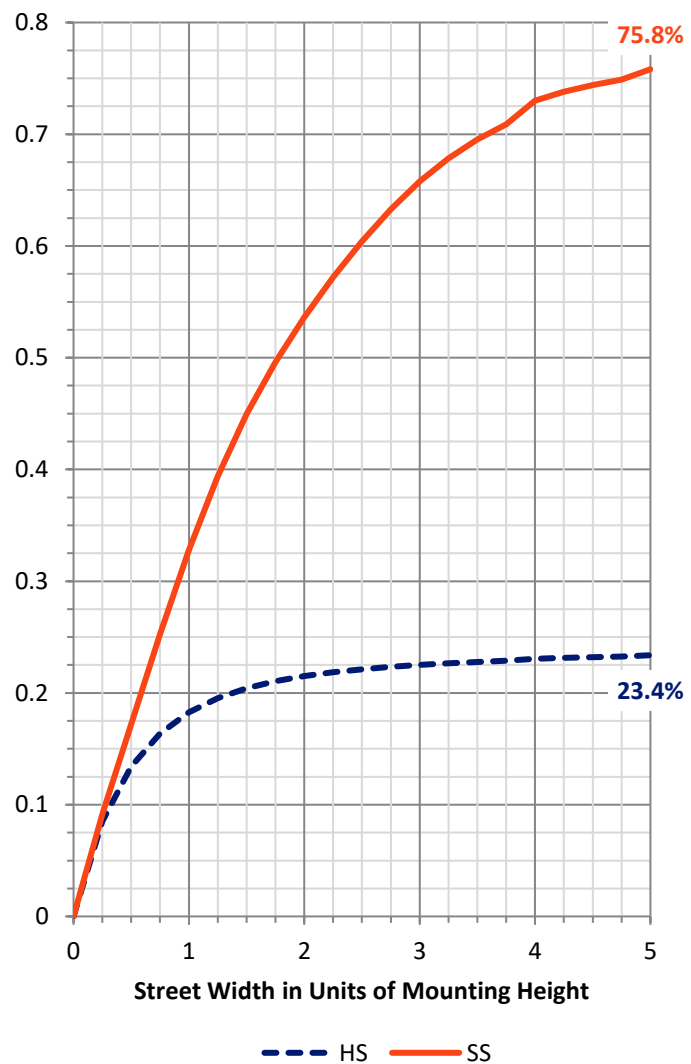
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3870.4	0.0	3870.4
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	12393.6	0.0	12393.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	16264.0	0.0	16264.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.2	1.3
10°-20°	591.9	3.6
20°-30°	993.9	6.1
30°-40°	1544.7	9.5
40°-50°	2292.7	14.1
50°-60°	3165.3	19.5
60°-70°	3840.2	23.6
70°-80°	3173.6	19.5
80°-90°	456.5	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°	16264.0	100.0
0°-180°	16264.0	100.0

Coefficient of Utilization



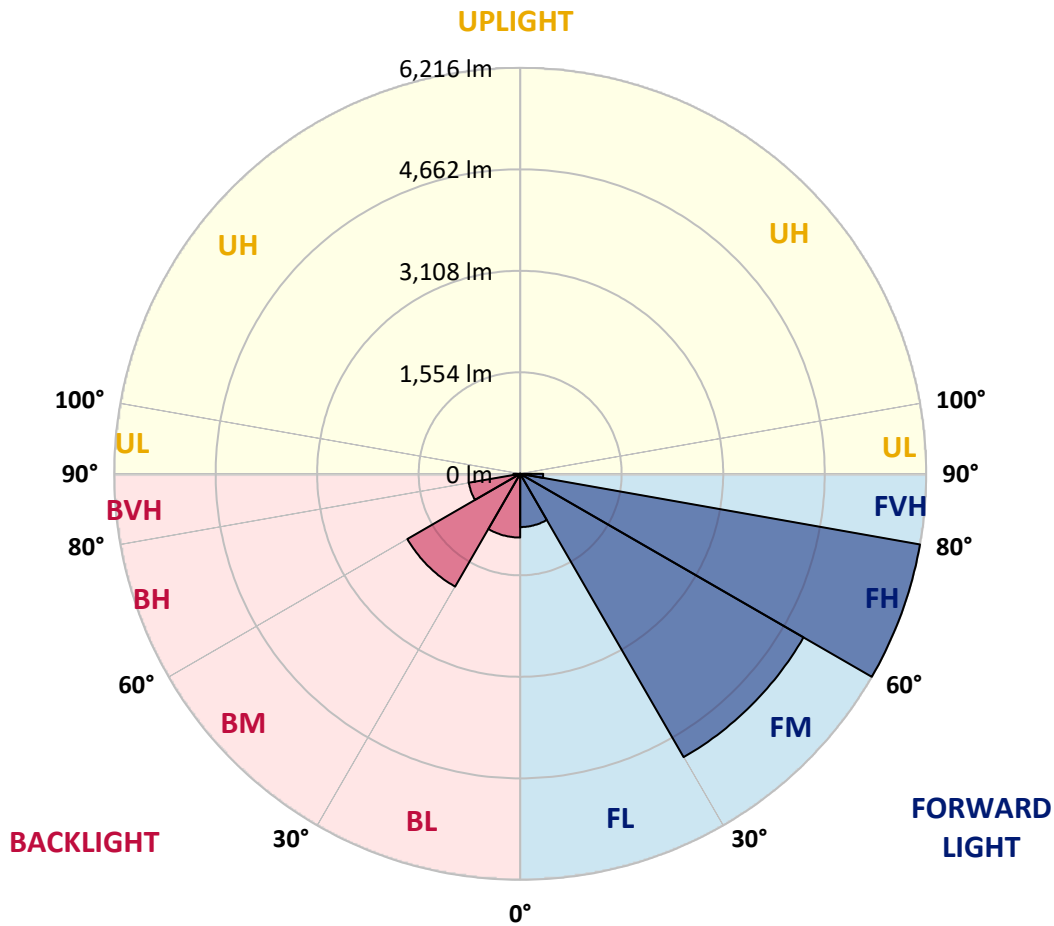
REPORT NUMBER: P882591
 CATALOG NUMBER: NAV-SB2C-740-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	815.6	5.0			
FM (30°-60°)	5008.4	30.8			
FH (60°-80°)	6215.9	38.2			G3/7500
FVH (80°-90°)	353.7	2.2			G3/500
BL (0°-30°)	975.4	6.0	B2/1000		
BM (30°-60°)	1994.3	12.3	B2/2500		
BH (60°-80°)	798.0	4.9	B2/1000		G2/1000
BVH (80°-90°)	102.8	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



REPORT NUMBER: P882591
 CATALOG NUMBER: NAV-SB2C-740-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3
2.5°	1998.5	2010.8	2016.1	2013.4	2026.6	2024.9	2043.3	2066.2	2097.8	2128.6	2173.4
5°	1844.6	1857.8	1869.2	1879.8	1905.3	1913.2	1942.2	1986.2	2044.2	2103.1	2177.0
7.5°	1701.3	1712.7	1730.3	1749.7	1792.7	1800.7	1849.0	1917.6	1998.5	2084.6	2186.6
10°	1584.4	1595.8	1614.3	1636.2	1689.9	1699.5	1761.1	1852.5	1958.0	2067.1	2197.2
12.5°	1534.2	1537.8	1548.3	1570.3	1616.9	1623.0	1690.7	1795.4	1918.5	2053.9	2213.0
15°	1531.6	1538.6	1539.5	1551.0	1589.6	1592.3	1654.7	1758.4	1893.8	2051.2	2236.7
17.5°	1558.0	1563.3	1555.3	1562.4	1594.9	1599.3	1648.5	1740.9	1885.9	2062.7	2277.2
20°	1628.3	1632.7	1609.0	1599.3	1623.0	1626.6	1674.9	1752.3	1893.8	2086.4	2332.6
22.5°	1777.8	1780.4	1722.4	1682.8	1684.6	1686.4	1728.6	1798.9	1924.6	2129.5	2402.9
25°	2010.8	2009.0	1916.7	1840.2	1796.3	1786.6	1814.7	1874.5	1976.5	2186.6	2493.5
27.5°	2283.3	2270.2	2177.8	2063.5	1967.7	1953.6	1947.5	1973.0	2050.4	2262.2	2604.3
30°	2591.1	2578.8	2479.4	2329.9	2197.2	2174.3	2116.3	2103.1	2160.3	2365.1	2758.1
32.5°	2928.7	2920.8	2802.1	2621.0	2443.4	2417.0	2319.4	2284.2	2329.1	2520.7	2972.7
35°	3211.8	3204.8	3106.3	2919.9	2702.7	2670.2	2570.9	2531.3	2554.1	2720.3	3253.1
37.5°	3467.7	3464.1	3379.7	3232.9	3008.7	2969.1	2857.5	2844.3	2839.9	2983.2	3593.4
40°	3705.1	3696.3	3608.3	3531.0	3364.8	3328.7	3230.3	3218.8	3185.4	3306.8	3978.5
42.5°	3967.9	3945.1	3817.6	3781.5	3736.7	3706.8	3647.9	3649.7	3575.8	3671.6	4386.5
45°	4182.5	4169.3	4038.3	4017.2	4065.5	4053.2	4104.2	4117.4	3974.1	4054.1	4810.2
47.5°	4412.8	4400.5	4289.7	4274.8	4405.8	4409.3	4589.6	4593.9	4362.7	4451.5	5234.9
50°	4696.8	4679.2	4569.3	4587.8	4734.6	4747.8	5077.5	5047.6	4720.6	4855.1	5656.1
52.5°	4884.1	4894.6	4870.9	4900.8	5101.3	5113.6	5557.6	5481.1	5074.9	5253.4	6069.3
55°	5022.1	5043.2	5117.1	5185.7	5488.1	5500.4	6010.4	5893.4	5368.5	5622.6	6457.9
57.5°	5199.7	5169.8	5307.9	5441.5	5855.6	5888.2	6450.9	6290.9	5628.8	5940.9	6724.3
60°	5454.7	5433.6	5540.9	5738.7	6267.1	6319.0	6916.9	6648.7	5819.6	6193.3	6776.2
62.5°	5971.7	5918.9	5935.6	6110.6	6785.9	6854.4	7442.6	6960.8	5914.5	6291.7	6498.3
65°	6744.5	6654.0	6569.6	6690.9	7516.5	7584.2	8036.1	7206.1	5879.4	6100.9	5760.7
67.5°	7717.8	7628.2	7524.4	7638.7	8592.7	8646.3	8768.5	7344.2	5602.4	5365.9	4456.8
70°	8520.6	8487.2	8611.1	9081.5	10311.5	10313.3	9707.5	7229.9	4843.6	3804.4	2578.8
72.5°	8414.2	8394.0	9047.2	10501.5	12478.0	12431.4	10596.4	6364.7	3262.8	1716.2	966.3
75°	6902.8	7033.8	8045.8	10476.0	13256.1	13249.9	10052.2	4046.2	1349.6	711.3	499.4
77.5°	3701.5	3909.0	5223.5	7734.5	10348.5	10504.1	7067.2	1415.6	579.4	455.4	345.5
80°	1207.2	1388.3	2082.0	3938.0	6724.3	6695.3	3028.9	555.7	396.5	322.7	239.1
82.5°	512.6	533.7	930.2	1859.6	3451.0	3397.3	964.5	319.2	278.7	220.7	147.7
85°	200.5	224.2	410.6	859.9	1494.7	1462.2	348.2	158.3	178.5	144.2	87.9
87.5°	65.9	80.0	146.8	294.5	465.1	448.4	85.3	54.5	77.4	65.9	31.7
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: P882591
 CATALOG NUMBER: NAV-SB2C-740-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3
2.5°	2185.8	2199.8	2216.5	2241.1	2262.2	2279.8	2298.3	2309.7	2314.1	2327.3	2326.4
5°	2201.6	2232.4	2273.7	2314.1	2353.7	2377.4	2398.5	2409.1	2418.7	2425.8	2427.5
7.5°	2228.0	2267.5	2332.6	2385.3	2418.7	2438.1	2452.2	2448.6	2452.2	2453.9	2456.6
10°	2250.8	2306.2	2383.6	2433.7	2459.2	2460.1	2456.6	2444.2	2438.1	2439.0	2440.7
12.5°	2278.1	2339.6	2423.1	2465.3	2472.4	2453.0	2438.1	2417.0	2409.1	2405.6	2403.8
15°	2315.0	2385.3	2466.2	2482.1	2464.5	2439.8	2414.4	2380.1	2362.5	2348.4	2352.8
17.5°	2359.8	2437.2	2499.6	2488.2	2450.4	2410.0	2368.6	2316.8	2280.7	2265.8	2266.6
20°	2422.3	2491.7	2525.1	2475.0	2417.9	2356.3	2286.0	2222.7	2189.3	2174.3	2172.6
22.5°	2497.9	2564.7	2549.8	2452.2	2371.3	2272.8	2184.9	2138.3	2121.6	2111.0	2112.8
25°	2588.4	2645.6	2567.3	2418.7	2294.8	2162.0	2094.3	2079.4	2071.5	2063.5	2063.5
27.5°	2706.3	2737.0	2580.5	2369.5	2175.2	2044.2	2019.6	2022.2	2019.6	2006.4	2009.0
30°	2861.9	2855.7	2592.8	2289.5	2038.0	1937.8	1939.6	1951.0	1952.8	1944.0	1948.4
32.5°	3066.7	3004.3	2599.0	2185.8	1907.0	1844.6	1846.4	1858.7	1867.5	1852.5	1859.6
35°	3314.7	3177.5	2589.3	2055.6	1805.9	1755.8	1742.6	1746.1	1748.8	1734.7	1744.4
37.5°	3603.9	3371.8	2546.2	1911.4	1722.4	1668.8	1640.6	1616.9	1602.8	1589.6	1598.4
40°	3921.3	3583.7	2467.1	1770.8	1629.2	1576.4	1534.2	1489.4	1441.9	1424.3	1432.3
42.5°	4253.7	3801.8	2371.3	1636.2	1521.9	1478.9	1434.0	1369.0	1297.7	1261.7	1266.1
45°	4598.3	4025.1	2277.2	1503.5	1412.0	1393.6	1341.7	1263.4	1186.1	1140.4	1136.8
47.5°	4936.0	4236.1	2139.2	1369.8	1309.2	1329.4	1288.9	1216.8	1130.7	1058.6	1050.7
50°	5258.6	4433.9	1913.2	1234.4	1225.6	1310.0	1271.4	1167.6	1069.1	976.8	968.9
52.5°	5578.7	4593.9	1623.9	1111.3	1180.8	1304.8	1248.5	1134.2	1013.7	917.0	906.5
55°	5850.4	4676.6	1345.2	1005.8	1115.7	1259.9	1221.2	1094.6	935.5	832.6	823.8
57.5°	6005.1	4609.8	1113.1	902.1	1026.1	1186.1	1174.6	1010.2	842.3	763.2	752.6
60°	5938.3	4339.0	923.2	811.5	940.8	1106.1	1093.8	926.7	771.1	696.3	685.8
62.5°	5569.9	3822.9	772.8	732.4	863.4	1024.3	1012.9	862.5	716.6	644.5	633.0
65°	4827.8	3109.8	655.9	666.5	785.1	925.8	942.5	808.9	673.5	603.1	591.7
67.5°	3682.2	2252.6	564.5	609.3	708.7	829.1	877.5	770.2	637.4	570.6	560.1
70°	2098.7	1279.3	487.1	553.9	641.0	739.4	827.4	739.4	598.8	543.4	536.3
72.5°	795.7	587.3	421.1	498.5	575.9	663.8	772.0	691.1	553.9	512.6	505.6
75°	424.7	357.8	354.3	433.5	501.2	590.0	702.5	643.6	520.5	541.6	559.2
77.5°	289.3	253.2	296.3	371.0	419.4	508.2	628.6	571.5	451.0	449.3	414.1
80°	200.5	179.4	240.9	298.9	324.4	427.3	548.6	490.6	367.5	342.9	328.0
82.5°	120.5	116.9	180.2	223.3	229.5	329.7	454.6	411.5	300.7	262.0	263.8
85°	65.9	69.5	115.2	131.0	133.6	230.4	356.1	318.3	231.2	194.3	196.1
87.5°	18.5	23.7	42.2	51.9	64.2	119.6	211.9	189.0	116.1	80.9	80.9
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)