

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: P883106

Luminaire Tested: **NAV-SB3B-750-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883106
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-750-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 5000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13297 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

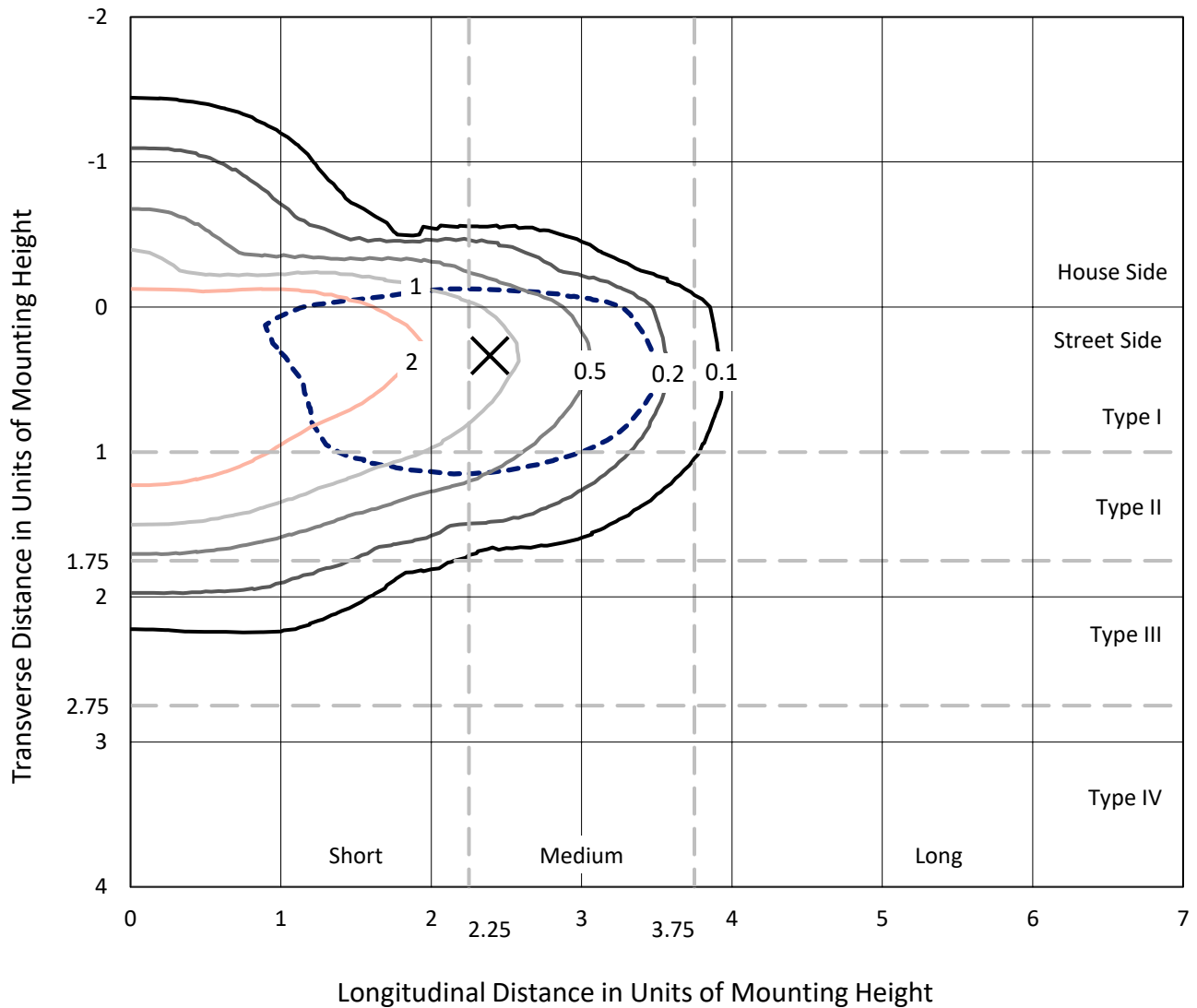
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

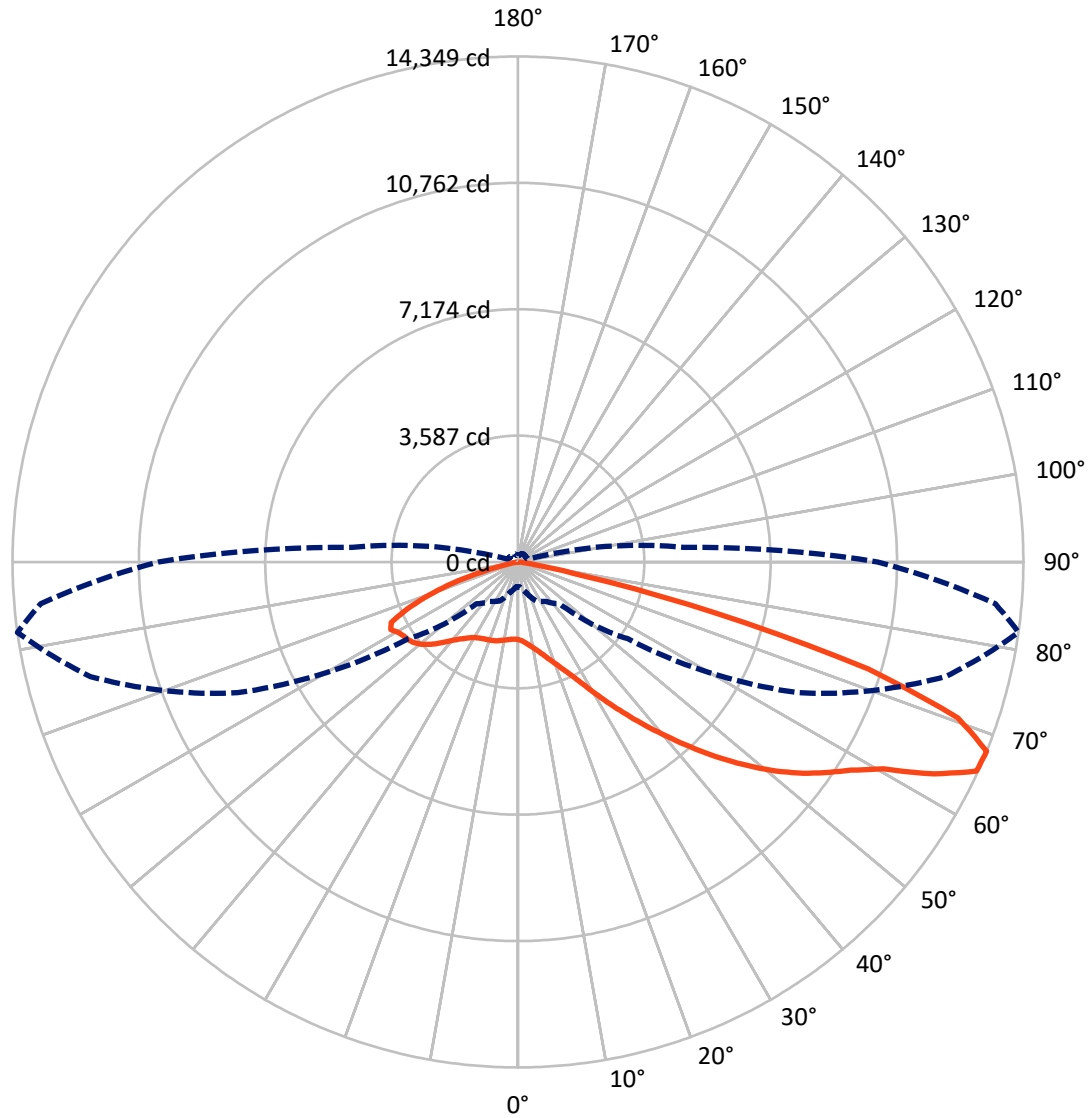
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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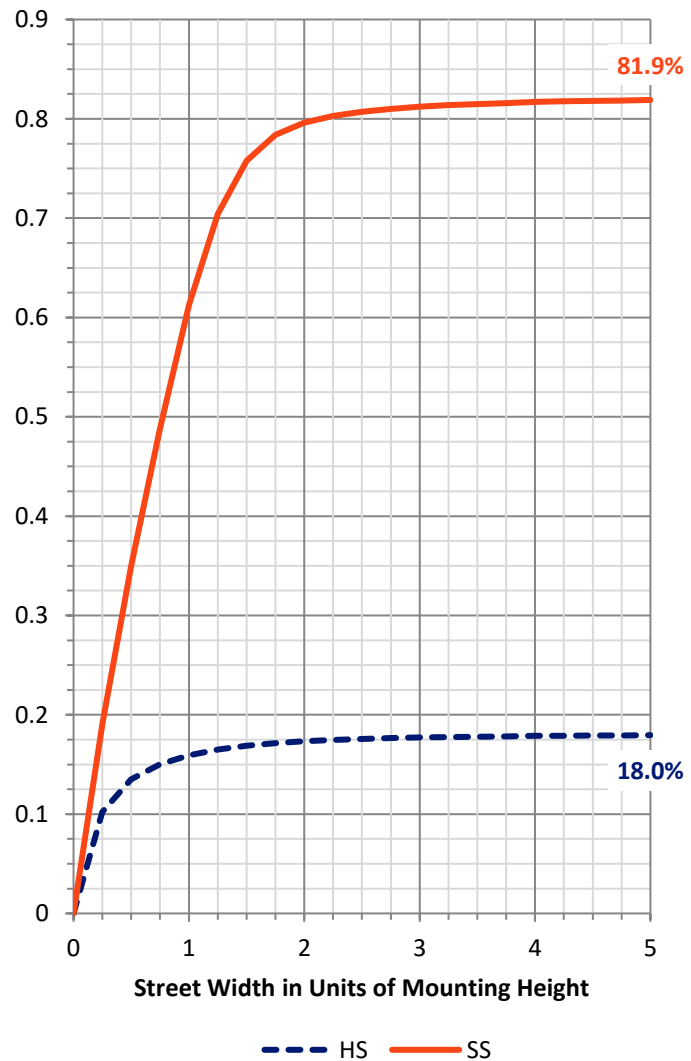
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2408.6	0.0	2408.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	10888.4	0.0	10888.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	13297.0	0.0	13297.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.3	1.5
10°-20°	510.0	3.8
20°-30°	816.9	6.1
30°-40°	1444.4	10.9
40°-50°	2530.8	19.0
50°-60°	3375.4	25.4
60°-70°	3142.3	23.6
70°-80°	1206.0	9.1
80°-90°	74.9	0.6
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°	13297.0	100.0
0°-180°	13297.0	100.0



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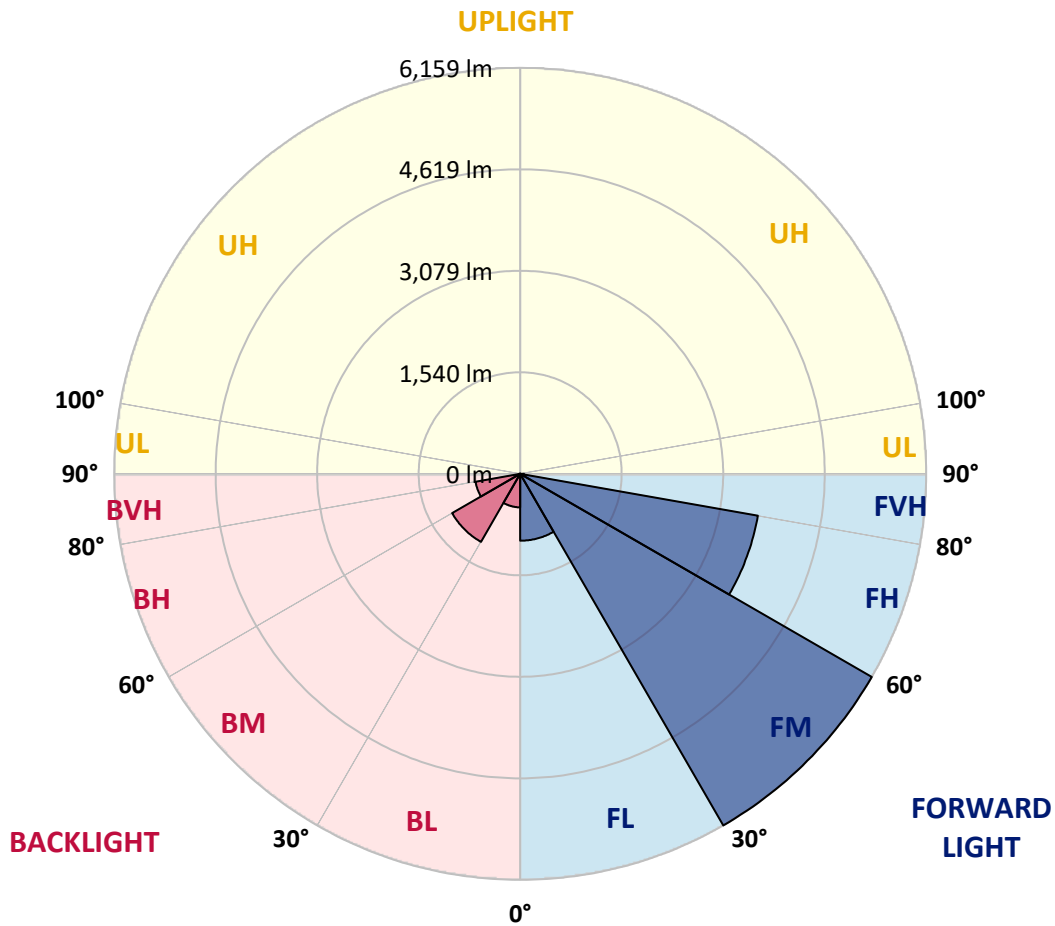
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1014.4	7.6			
FM (30°-60°)	6158.6	46.3			
FH (60°-80°)	3660.9	27.5			G2/5000
FVH (80°-90°)	54.5	0.4			G1/100
BL (0°-30°)	508.7	3.8	B2/1000		
BM (30°-60°)	1192.0	9.0	B2/2500		
BH (60°-80°)	687.5	5.2	B2/1000		G2/1000
BVH (80°-90°)	20.4	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9
2.5°	2328.3	2341.7	2334.0	2330.2	2323.5	2313.9	2306.3	2282.3	2257.4	2241.2	2235.4
5°	2375.2	2388.6	2387.6	2391.5	2396.2	2399.1	2397.2	2370.4	2335.0	2307.2	2290.9
7.5°	2335.0	2350.3	2362.7	2381.9	2415.4	2450.8	2468.0	2462.3	2425.9	2387.6	2367.5
10°	2221.1	2237.3	2267.0	2312.0	2382.8	2459.4	2523.6	2553.3	2530.3	2488.2	2460.4
12.5°	2012.4	2028.6	2087.0	2184.7	2303.4	2436.5	2559.0	2638.5	2644.2	2602.1	2569.5
15°	1777.8	1794.1	1856.3	1978.8	2159.8	2373.3	2578.1	2728.4	2779.2	2742.8	2703.6
17.5°	1632.3	1646.6	1693.6	1792.2	1980.8	2246.9	2571.4	2824.2	2940.0	2911.3	2864.4
20°	1588.2	1600.7	1622.7	1691.6	1848.6	2115.7	2527.4	2914.2	3113.3	3097.0	3044.4
22.5°	1635.2	1646.6	1653.3	1684.0	1782.6	2029.6	2471.9	3006.1	3314.3	3316.3	3252.1
25°	1743.3	1754.8	1747.2	1766.3	1809.4	2002.8	2450.8	3114.3	3567.1	3588.1	3515.4
27.5°	1921.4	1922.4	1904.2	1903.2	1909.9	2043.0	2472.8	3230.1	3885.9	3925.1	3835.1
30°	2278.5	2264.1	2194.2	2118.6	2084.2	2163.6	2534.1	3367.0	4262.1	4332.0	4219.0
32.5°	2829.0	2807.9	2679.6	2498.7	2316.8	2358.0	2644.2	3523.0	4671.9	4798.2	4660.4
35°	3426.4	3420.6	3286.6	3017.6	2699.7	2634.6	2823.2	3727.9	5119.0	5320.0	5156.3
37.5°	3981.6	3978.7	3902.2	3585.3	3198.5	3020.4	3110.4	3996.0	5597.6	5888.7	5695.3
40°	4489.0	4497.6	4421.0	4137.7	3748.0	3515.4	3501.0	4327.2	6129.9	6508.1	6278.3
42.5°	4927.5	4937.1	4859.5	4649.9	4290.8	4063.0	3980.7	4733.1	6649.8	7173.4	6901.5
45°	5225.2	5284.6	5273.1	5105.5	4848.0	4611.6	4557.0	5242.4	7242.4	7879.0	7560.2
47.5°	5309.5	5364.0	5450.2	5473.2	5316.2	5083.5	5148.6	5856.1	7841.7	8585.5	8222.7
50°	5101.7	5152.5	5331.5	5569.9	5679.0	5607.2	5724.0	6513.8	8455.3	9290.1	8872.7
52.5°	4692.0	4743.7	4969.6	5346.8	5792.0	6017.9	6301.3	7161.9	9049.8	9957.4	9488.3
55°	4099.4	4153.9	4444.0	4871.0	5576.6	6187.4	6782.8	7809.1	9594.6	10557.7	10043.6
57.5°	3293.3	3333.5	3635.1	4232.4	5034.7	6018.9	7138.0	8515.6	10107.7	11147.4	10594.0
60°	2146.4	2181.8	2532.2	3198.5	4136.7	5455.9	7208.8	9303.5	10789.3	11914.2	11336.0
62.5°	1427.4	1451.3	1659.1	2148.3	2913.2	4375.1	6794.3	9932.5	11788.8	13248.8	12608.3
65°	979.4	1003.3	1211.0	1551.9	1882.2	2894.1	5602.4	9849.2	12694.5	14308.6	13551.3
67.5°	698.9	719.0	895.1	1216.8	1362.3	1681.1	3797.8	8784.6	12564.3	14348.8	13602.0
70°	500.7	512.2	657.7	947.8	1082.8	1010.0	2111.9	6718.7	11000.9	13249.7	12566.2
72.5°	350.4	354.2	456.7	721.8	872.1	737.2	1005.2	4479.4	8320.3	10399.7	9742.0
75°	237.4	242.2	307.3	529.4	699.8	562.9	532.3	2402.0	4884.4	5756.5	5160.1
77.5°	145.5	147.4	198.2	361.9	523.7	428.9	342.7	1017.7	1889.8	1855.3	1581.5
80°	82.3	82.3	126.4	225.0	357.1	276.7	240.3	432.7	598.3	525.6	463.4
82.5°	46.0	46.9	91.9	139.8	236.5	163.7	132.1	200.1	258.5	228.8	199.1
85°	19.1	21.1	56.5	66.1	113.0	81.4	53.6	84.2	95.7	85.2	62.2
87.5°	1.9	2.9	17.2	12.4	13.4	16.3	7.7	16.3	13.4	13.4	9.6
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°	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9	2202.9
2.5°	2217.2	2202.9	2166.5	2124.4	2068.8	2042.0	2005.6	1980.8	1959.7	1961.6	1942.5
5°	2260.3	2223.9	2142.5	2041.1	1914.7	1824.7	1729.0	1662.9	1609.3	1597.8	1572.0
7.5°	2319.7	2262.2	2119.6	1936.7	1723.2	1561.4	1416.9	1324.0	1258.0	1236.9	1215.8
10°	2396.2	2313.0	2089.9	1805.6	1498.3	1292.4	1137.3	1064.6	1019.6	1004.3	992.8
12.5°	2485.3	2371.4	2050.6	1645.7	1266.6	1068.4	969.8	933.4	919.1	914.3	911.4
15°	2597.3	2444.1	1991.3	1456.1	1070.3	931.5	889.4	884.6	886.5	884.6	883.6
17.5°	2730.4	2523.6	1894.6	1260.8	938.2	861.6	846.3	850.1	854.9	854.0	852.0
20°	2875.9	2602.1	1771.1	1087.5	848.2	811.8	803.2	807.0	810.9	809.0	808.0
22.5°	3041.5	2686.3	1634.2	952.6	787.9	765.9	756.3	757.3	757.3	753.4	751.5
25°	3239.7	2779.2	1490.6	856.8	741.9	724.7	713.2	709.4	703.7	692.2	690.2
27.5°	3476.1	2877.8	1352.7	789.8	705.6	689.3	675.9	666.3	652.0	632.8	630.9
30°	3742.3	2997.5	1235.9	747.7	676.8	660.6	645.3	630.9	609.8	585.9	584.0
32.5°	4055.3	3125.7	1150.7	719.9	651.0	633.8	615.6	598.3	575.4	551.4	552.4
35°	4428.7	3280.8	1101.0	700.8	630.9	607.9	587.8	568.7	551.4	530.4	528.5
37.5°	4833.7	3445.5	1085.6	691.2	617.5	582.1	559.1	545.7	543.8	531.3	530.4
40°	5276.9	3640.8	1097.1	685.5	603.1	557.2	532.3	529.4	534.2	512.2	513.1
42.5°	5746.0	3872.5	1116.3	678.8	583.0	532.3	508.4	508.4	504.5	473.9	473.9
45°	6253.4	4139.6	1135.4	662.5	559.1	507.4	489.2	482.5	466.2	436.6	435.6
47.5°	6764.6	4411.5	1149.8	632.8	530.4	486.3	470.1	454.7	430.8	404.0	403.0
50°	7250.0	4655.6	1134.5	588.8	497.8	466.2	449.0	427.9	402.1	383.9	381.0
52.5°	7683.7	4867.2	1069.4	537.1	463.4	445.2	429.9	407.8	386.8	367.6	365.7
55°	8060.9	5038.5	954.5	488.2	432.7	427.0	411.7	383.9	355.2	338.9	337.0
57.5°	8422.8	5168.7	810.9	448.0	405.0	406.9	383.9	359.0	332.2	315.0	313.1
60°	8904.3	5343.0	665.4	410.7	375.3	381.0	356.1	337.9	304.4	282.4	279.5
62.5°	9674.0	5613.9	528.5	364.8	340.8	342.7	332.2	310.2	270.0	244.1	242.2
65°	10284.8	5514.3	416.4	315.0	301.6	304.4	304.4	280.5	237.4	207.7	204.9
67.5°	10215.9	4721.7	332.2	266.1	264.2	266.1	272.8	252.7	210.6	186.7	182.9
70°	9410.8	3755.7	266.1	221.1	229.8	225.0	244.1	230.7	189.6	165.6	162.7
72.5°	7678.9	2705.5	203.0	182.9	176.2	183.8	220.2	207.7	158.0	131.2	128.3
75°	4487.1	1443.7	151.3	144.6	127.3	153.2	195.3	177.1	120.6	96.7	93.8
77.5°	1460.9	503.6	111.1	106.3	94.8	123.5	166.6	149.3	98.6	76.6	73.7
80°	391.6	152.2	75.6	69.9	61.3	91.9	132.1	118.7	70.8	49.8	48.8
82.5°	157.0	64.1	44.0	39.3	33.5	63.2	104.4	95.7	52.7	31.6	31.6
85°	50.7	21.1	16.3	12.4	15.3	39.3	62.2	65.1	37.3	16.3	12.4
87.5°	6.7	2.9	2.9	3.8	2.9	6.7	19.1	18.2	10.5	1.9	0.0
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)