

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: P883306

Luminaire Tested: **NAV-SB3C-830-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883306
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-SB3C-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 615mA 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: 14353 lumens
Efficiency: N/A
Efficacy: 96.3 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

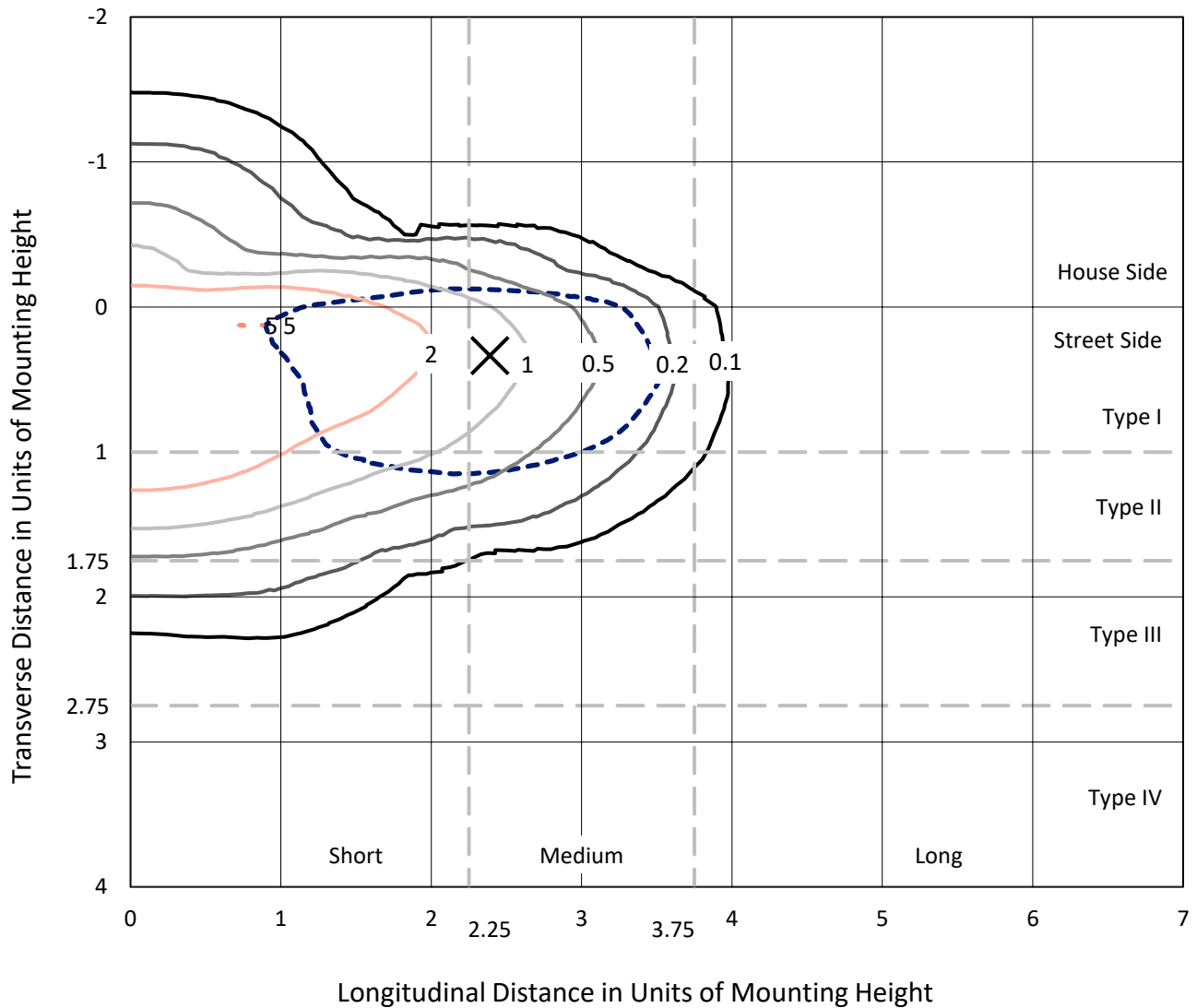
Input Watts (W): 149.1
Input Voltage (V): 120.0
Input Current (Ain): 1.259
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.297
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

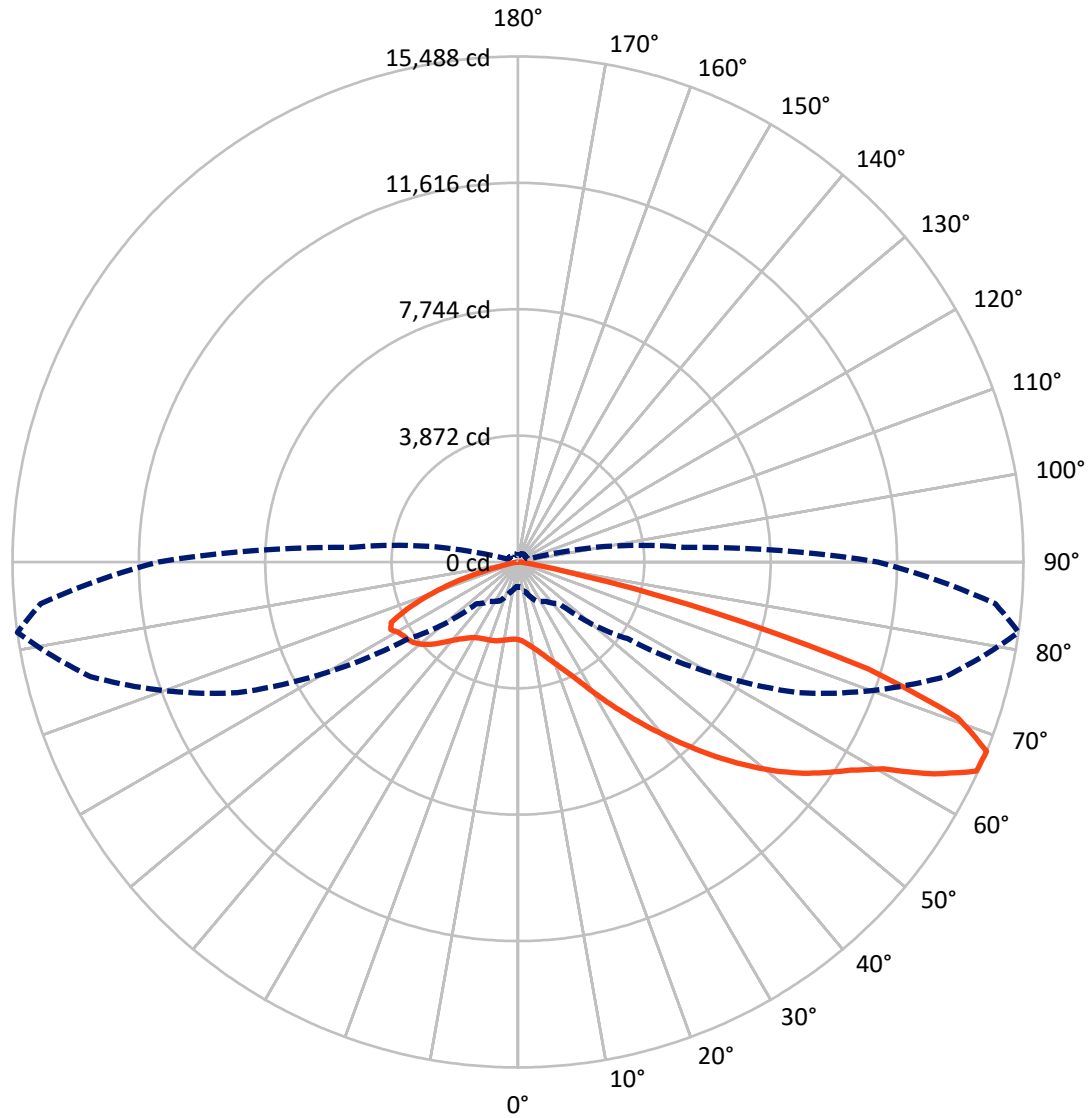
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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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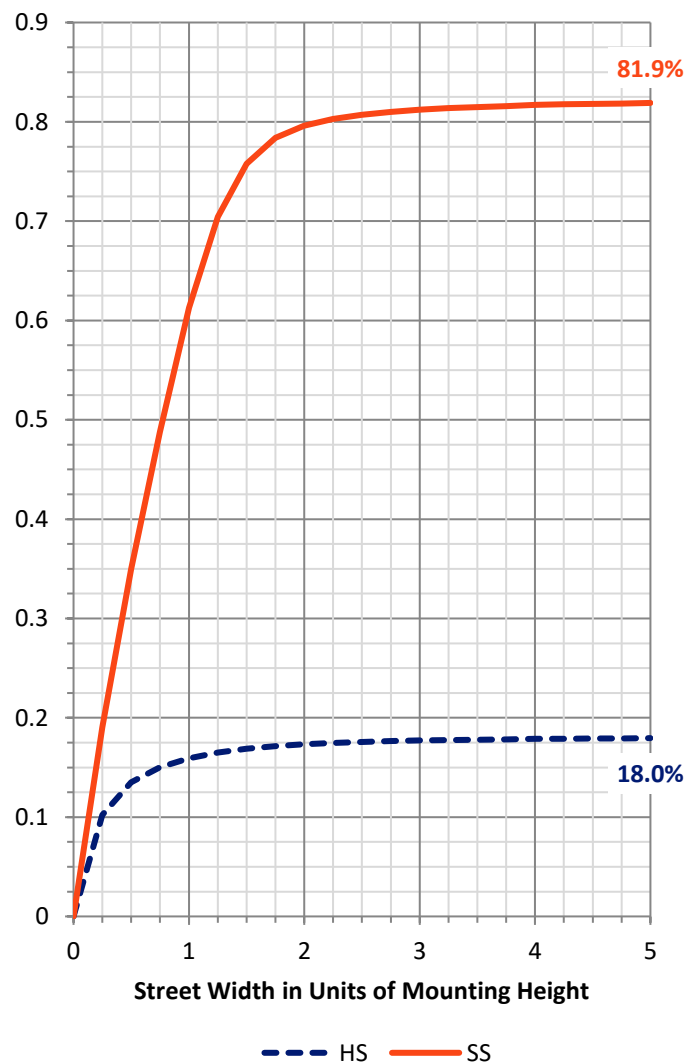
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2599.9	0.0	2599.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	11753.1	0.0	11753.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	14353.0	0.0	14353.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.8	1.5
10°-20°	550.5	3.8
20°-30°	881.7	6.1
30°-40°	1559.2	10.9
40°-50°	2731.8	19.0
50°-60°	3643.5	25.4
60°-70°	3391.9	23.6
70°-80°	1301.8	9.1
80°-90°	80.9	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°	14353.0	100.0
0°-180°	14353.0	100.0

Coefficient of Utilization



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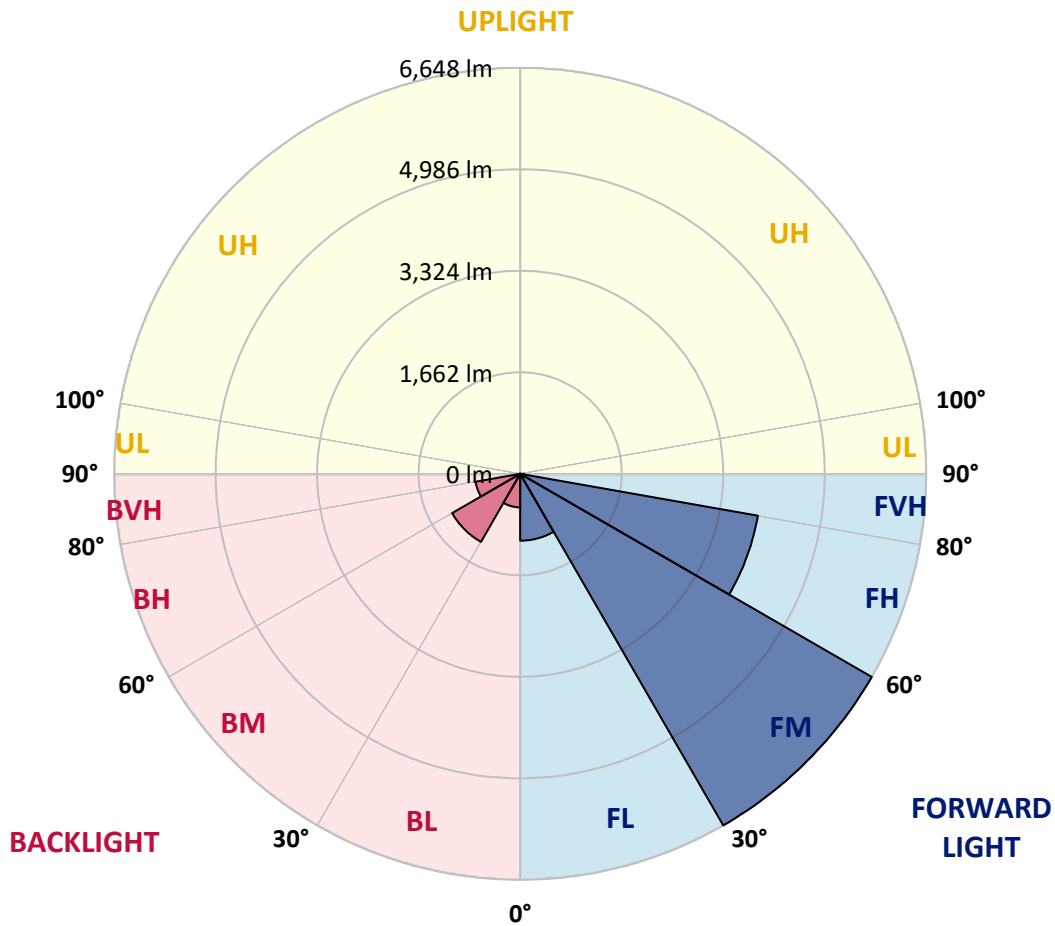
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1095.0	7.6			
FM (30°-60°)	6647.7	46.3			
FH (60°-80°)	3951.6	27.5			G2/5000
FVH (80°-90°)	58.8	0.4			G1/100
BL (0°-30°)	549.1	3.8	B2/1000		
BM (30°-60°)	1286.7	9.0	B2/2500		
BH (60°-80°)	742.1	5.2	B2/1000		G2/1000
BVH (80°-90°)	22.1	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°	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8
2.5°	2513.2	2527.6	2519.4	2515.2	2508.0	2497.7	2489.4	2463.6	2436.7	2419.1	2412.9
5°	2563.8	2578.3	2577.2	2581.4	2586.5	2589.6	2587.6	2558.6	2520.4	2490.4	2472.9
7.5°	2520.4	2536.9	2550.4	2571.0	2607.2	2645.5	2664.1	2657.9	2618.6	2577.2	2555.5
10°	2397.4	2415.0	2447.0	2495.6	2572.1	2654.8	2724.0	2756.0	2731.2	2685.8	2655.8
12.5°	2172.2	2189.7	2252.8	2358.2	2486.3	2630.0	2762.2	2848.0	2854.2	2808.7	2773.6
15°	1919.0	1936.6	2003.7	2136.0	2331.3	2561.7	2782.9	2945.1	2999.9	2960.6	2918.3
17.5°	1761.9	1777.4	1828.0	1934.5	2138.1	2425.3	2775.7	3048.5	3173.5	3142.5	3091.9
20°	1714.4	1727.8	1751.6	1826.0	1995.5	2283.8	2728.1	3145.6	3360.6	3343.0	3286.1
22.5°	1765.0	1777.4	1784.6	1817.7	1924.2	2190.8	2668.2	3244.8	3577.6	3579.6	3510.4
25°	1881.8	1894.2	1885.9	1906.6	1953.1	2161.8	2645.5	3361.6	3850.4	3873.1	3794.6
27.5°	2074.0	2075.0	2055.4	2054.4	2061.6	2205.2	2669.2	3486.6	4194.5	4236.9	4139.7
30°	2459.4	2443.9	2368.5	2286.9	2249.7	2335.4	2735.4	3634.4	4600.6	4676.0	4554.1
32.5°	3053.6	3030.9	2892.4	2697.1	2500.8	2545.2	2854.2	3802.8	5042.9	5179.3	5030.5
35°	3698.5	3692.3	3547.6	3257.2	2914.1	2843.9	3047.4	4024.0	5525.5	5742.5	5565.8
37.5°	4297.8	4294.7	4212.1	3870.0	3452.5	3260.3	3357.5	4313.3	6042.2	6356.3	6147.6
40°	4845.5	4854.8	4772.1	4466.3	4045.7	3794.6	3779.1	4670.9	6616.7	7024.9	6776.9
42.5°	5318.8	5329.1	5245.4	5019.1	4631.6	4385.7	4296.8	5109.0	7177.9	7743.1	7449.6
45°	5640.2	5704.3	5691.9	5511.0	5233.0	4977.8	4918.9	5658.8	7817.5	8504.7	8160.6
47.5°	5731.1	5790.0	5883.0	5907.8	5738.4	5487.2	5557.5	6321.2	8464.4	9267.3	8875.7
50°	5506.9	5561.6	5754.9	6012.2	6130.0	6052.5	6178.6	7031.1	9126.8	10027.9	9577.4
52.5°	5064.6	5120.4	5364.3	5771.4	6251.9	6495.8	6801.7	7730.7	9768.5	10748.2	10241.8
55°	4424.9	4483.8	4796.9	5257.8	6019.4	6678.7	7321.5	8429.3	10356.5	11396.1	10841.2
57.5°	3554.8	3598.2	3923.7	4568.6	5434.5	6496.9	7704.9	9191.9	10910.4	12032.7	11435.4
60°	2316.8	2355.1	2733.3	3452.5	4465.2	5889.2	7781.3	10042.4	11646.2	12860.4	12236.2
62.5°	1540.8	1566.6	1790.8	2318.9	3144.6	4722.5	7333.9	10721.3	12725.0	14300.9	13609.6
65°	1057.1	1083.0	1307.2	1675.1	2031.6	3123.9	6047.3	10631.4	13702.6	15444.9	14627.5
67.5°	754.4	776.1	966.2	1313.4	1470.5	1814.6	4099.4	9482.3	13562.1	15488.3	14682.3
70°	540.5	552.9	709.9	1023.0	1168.8	1090.2	2279.6	7252.3	11874.6	14302.0	13564.1
72.5°	378.2	382.4	492.9	779.2	941.4	795.7	1085.0	4835.2	8981.1	11225.6	10515.7
75°	256.3	261.4	331.7	571.5	755.4	607.6	574.6	2592.7	5272.3	6213.7	5569.9
77.5°	157.1	159.1	213.9	390.6	565.3	463.0	369.9	1098.5	2039.9	2002.7	1707.1
80°	88.9	88.9	136.4	242.8	385.5	298.6	259.4	467.1	645.9	567.3	500.2
82.5°	49.6	50.6	99.2	150.9	255.2	176.7	142.6	216.0	279.0	247.0	214.9
85°	20.7	22.7	61.0	71.3	121.9	87.8	57.9	90.9	103.3	92.0	67.2
87.5°	2.1	3.1	18.6	13.4	14.5	17.6	8.3	17.6	14.5	14.5	10.3
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°	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8	2377.8
2.5°	2393.3	2377.8	2338.5	2293.1	2233.1	2204.2	2164.9	2138.1	2115.3	2117.4	2096.7
5°	2439.8	2400.5	2312.7	2203.2	2066.8	1969.6	1866.3	1795.0	1737.1	1724.7	1696.8
7.5°	2503.9	2441.9	2287.9	2090.5	1860.1	1685.4	1529.4	1429.2	1357.9	1335.1	1312.4
10°	2586.5	2496.6	2255.9	1949.0	1617.2	1395.1	1227.7	1149.1	1100.5	1084.0	1071.6
12.5°	2682.7	2559.7	2213.5	1776.4	1367.2	1153.3	1046.8	1007.5	992.0	986.9	983.8
15°	2803.6	2638.2	2149.4	1571.8	1155.3	1005.5	960.0	954.8	956.9	954.8	953.8
17.5°	2947.2	2724.0	2045.1	1361.0	1012.7	930.0	913.5	917.6	922.8	921.8	919.7
20°	3104.3	2808.7	1911.8	1173.9	915.6	876.3	867.0	871.1	875.3	873.2	872.2
22.5°	3283.0	2899.7	1764.0	1028.2	850.5	826.7	816.4	817.4	817.4	813.3	811.2
25°	3497.0	2999.9	1609.0	924.9	800.9	782.3	769.9	765.7	759.5	747.1	745.1
27.5°	3752.2	3106.3	1460.2	852.5	761.6	744.0	729.6	719.2	703.7	683.1	681.0
30°	4039.5	3235.5	1334.1	807.1	730.6	713.0	696.5	681.0	658.3	632.4	630.4
32.5°	4377.4	3374.0	1242.1	777.1	702.7	684.1	664.5	645.9	621.1	595.2	596.3
35°	4780.4	3541.4	1188.4	756.4	681.0	656.2	634.5	613.8	595.2	572.5	570.4
37.5°	5217.5	3719.1	1171.9	746.1	666.5	628.3	603.5	589.0	587.0	573.5	572.5
40°	5696.0	3929.9	1184.3	739.9	651.0	601.4	574.6	571.5	576.6	552.9	553.9
42.5°	6202.3	4180.0	1204.9	732.7	629.3	574.6	548.7	548.7	544.6	511.5	511.5
45°	6750.0	4468.3	1225.6	715.1	603.5	547.7	528.1	520.8	503.3	471.2	470.2
47.5°	7301.9	4761.8	1241.1	683.1	572.5	525.0	507.4	490.9	465.0	436.1	435.1
50°	7825.8	5025.3	1224.6	635.5	537.4	503.3	484.7	461.9	434.0	414.4	411.3
52.5°	8293.9	5253.7	1154.3	579.7	500.2	480.5	464.0	440.2	417.5	396.8	394.8
55°	8701.1	5438.7	1030.3	527.0	467.1	460.9	444.4	414.4	383.4	365.8	363.7
57.5°	9091.7	5579.2	875.3	483.6	437.1	439.2	414.4	387.5	358.6	340.0	337.9
60°	9611.5	5767.3	718.2	443.3	405.1	411.3	384.4	364.8	328.6	304.8	301.7
62.5°	10442.3	6059.7	570.4	393.7	367.9	369.9	358.6	334.8	291.4	263.5	261.4
65°	11101.6	5952.3	449.5	340.0	325.5	328.6	328.6	302.8	256.3	224.2	221.1
67.5°	11027.2	5096.6	358.6	287.3	285.2	287.3	294.5	272.8	227.3	201.5	197.4
70°	10158.1	4053.9	287.3	238.7	248.0	242.8	263.5	249.0	204.6	178.8	175.7
72.5°	8288.7	2920.3	219.1	197.4	190.1	198.4	237.7	224.2	170.5	141.6	138.5
75°	4843.5	1558.3	163.3	156.0	137.4	165.3	210.8	191.2	130.2	104.4	101.3
77.5°	1576.9	543.6	119.9	114.7	102.3	133.3	179.8	161.2	106.4	82.7	79.6
80°	422.7	164.3	81.6	75.4	66.1	99.2	142.6	128.1	76.5	53.7	52.7
82.5°	169.5	69.2	47.5	42.4	36.2	68.2	112.6	103.3	56.8	34.1	34.1
85°	54.8	22.7	17.6	13.4	16.5	42.4	67.2	70.3	40.3	17.6	13.4
87.5°	7.2	3.1	3.1	4.1	3.1	7.2	20.7	19.6	11.4	2.1	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)