

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: P967896

Luminaire Tested: **NAV-SB5A-830-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967896
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-830-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

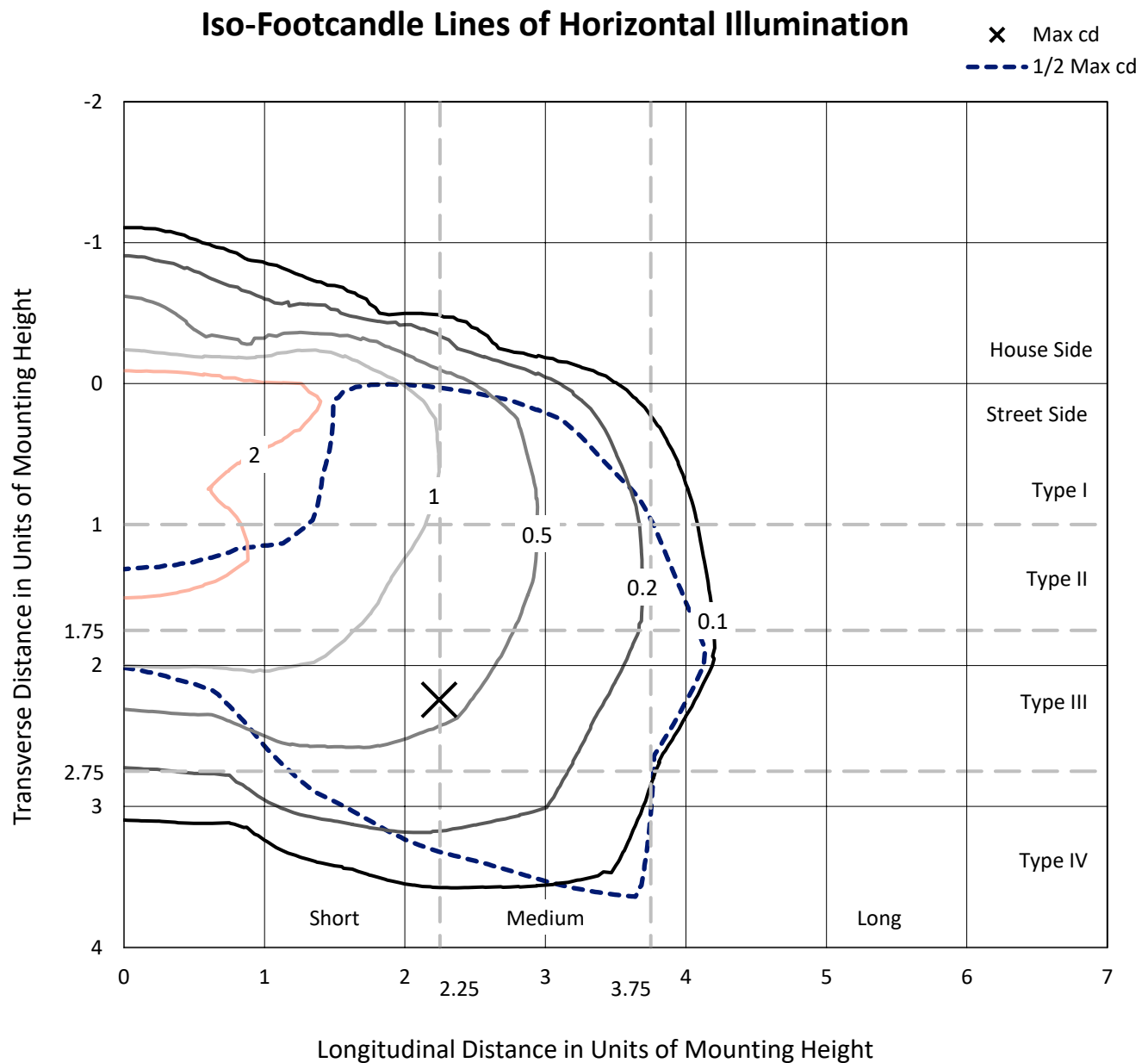
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16076.1 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G4

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



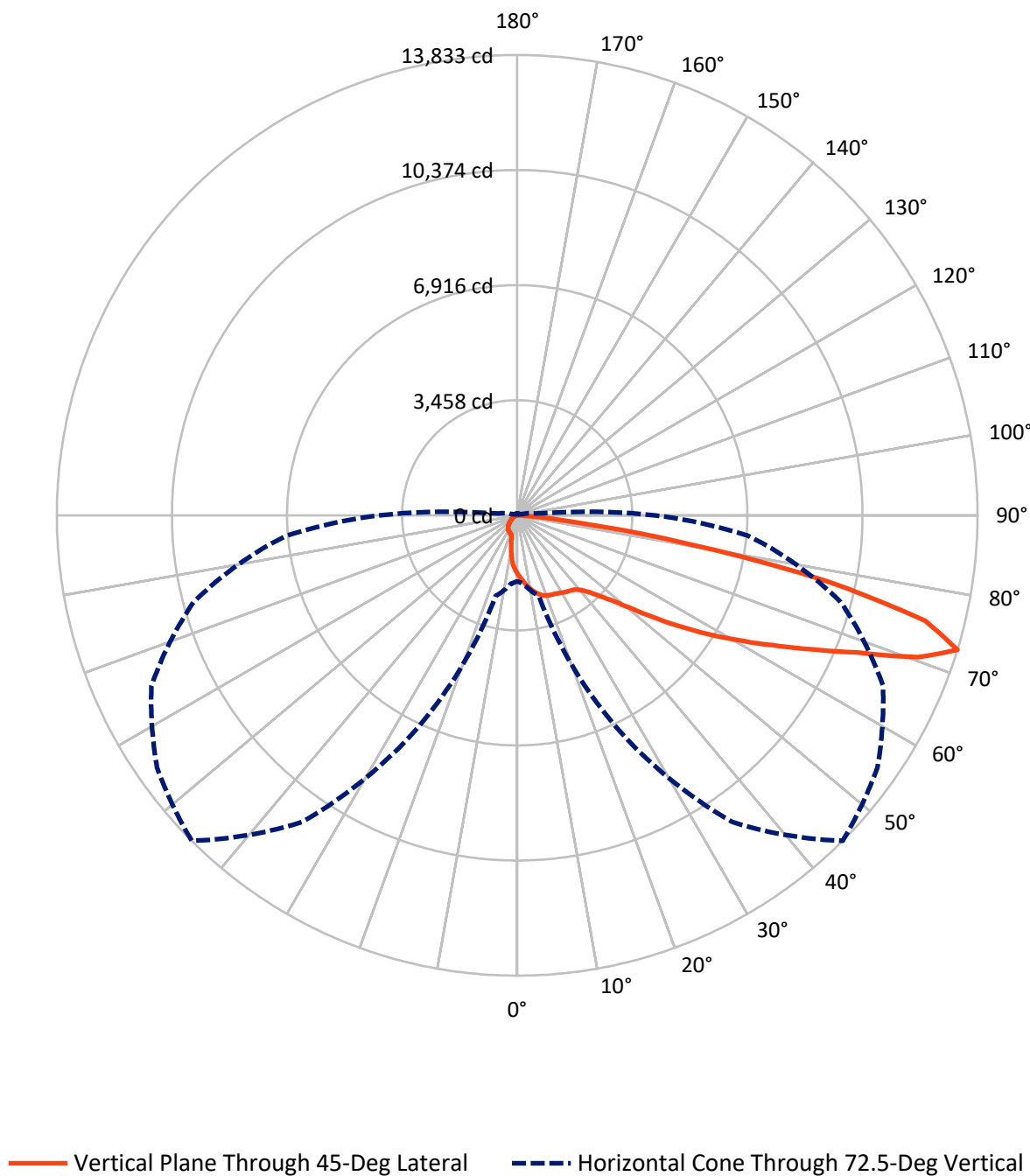
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Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1689.2	0.0	1689.2
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	14387.0	0.0	14387.0
	% Fixture	89.5	0.0	89.5
Total	Lumens	16076.1	0.0	16076.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.9	1.0
10°-20°	485.0	3.0
20°-30°	796.4	5.0
30°-40°	1129.5	7.0
40°-50°	1866.9	11.6
50°-60°	3353.7	20.9
60°-70°	4656.7	29.0
70°-80°	3377.8	21.0
80°-90°	244.2	1.5
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°	16076.1	100.0
0°-180°	16076.1	100.0

Coefficient of Utilization



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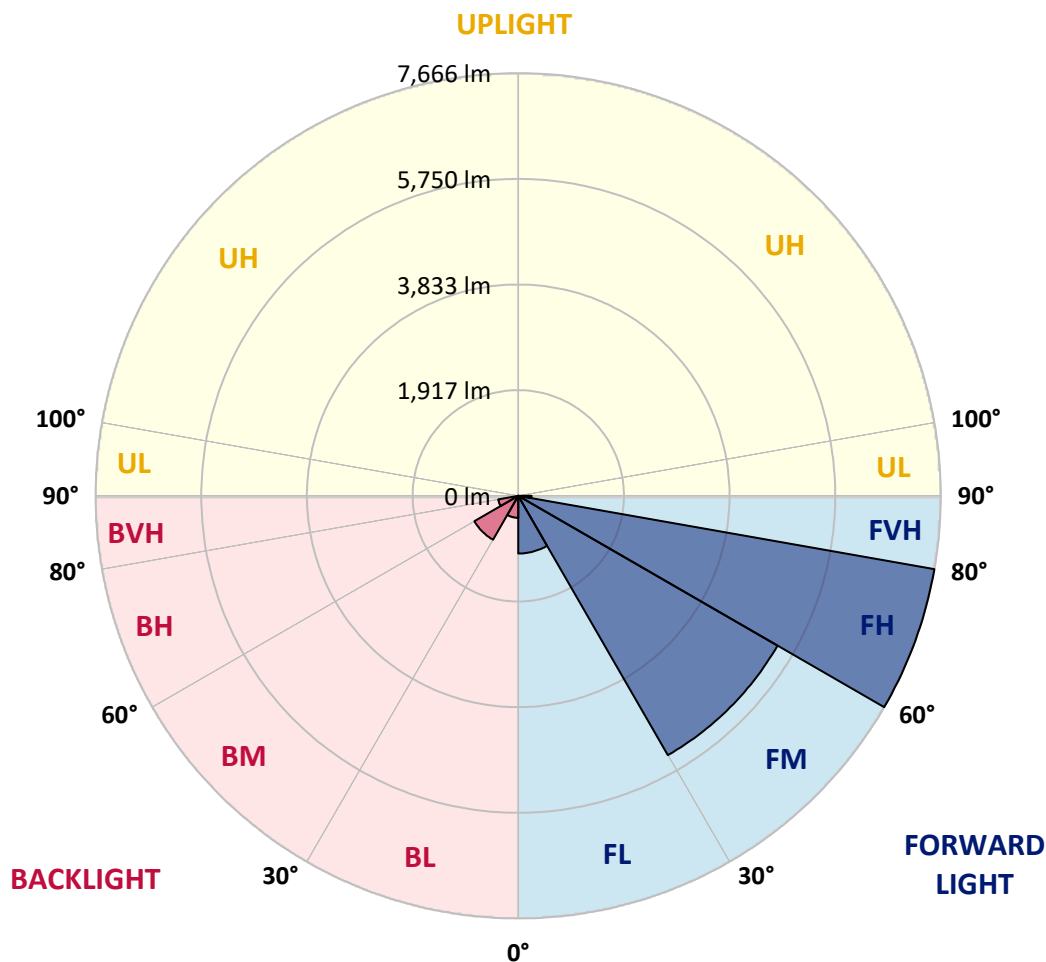
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1047.2	6.5			
FM	(30°-60°)	5431.4	33.8			
FH	(60°-80°)	7666.2	47.7			G4/12000
FVH	(80°-90°)	242.2	1.5			G3/500
BL	(0°-30°)	400.1	2.5	B1/500		
BM	(30°-60°)	918.7	5.7	B1/1000		
BH	(60°-80°)	368.4	2.3	B1/500		G1/500
BVH	(80°-90°)	2.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2
2.5°	1923.6	1926.9	1924.6	1911.5	1889.6	1877.5	1870.9	1849.0	1834.6	1809.4	1783.1
5°	2100.2	2113.4	2105.8	2079.4	2037.7	2008.1	1999.3	1954.3	1913.7	1866.5	1811.7
7.5°	2287.9	2294.5	2280.2	2246.2	2190.2	2139.8	2132.1	2069.5	2004.8	1932.3	1857.7
10°	2450.3	2458.0	2436.0	2386.6	2323.0	2260.4	2249.5	2180.4	2103.5	2014.6	1919.2
12.5°	2586.4	2594.1	2565.5	2506.2	2436.0	2371.2	2360.3	2287.9	2203.3	2104.6	1986.1
15°	2689.5	2703.7	2665.3	2601.7	2526.0	2461.2	2455.8	2384.5	2302.1	2192.4	2066.2
17.5°	2749.9	2764.1	2727.9	2651.1	2586.4	2531.4	2524.9	2465.6	2388.9	2283.5	2144.1
20°	2759.7	2772.9	2734.5	2667.6	2613.8	2569.9	2566.6	2523.8	2467.8	2366.9	2228.7
22.5°	2730.1	2746.6	2711.4	2657.6	2620.3	2597.4	2592.9	2568.8	2537.0	2451.4	2307.6
25°	2699.3	2712.6	2686.2	2639.0	2619.3	2617.0	2620.3	2616.0	2609.3	2537.0	2399.8
27.5°	2697.2	2711.4	2681.8	2636.8	2625.8	2648.9	2652.2	2673.0	2678.5	2614.9	2488.7
30°	2715.8	2725.7	2697.2	2650.0	2644.5	2697.2	2698.3	2735.6	2744.3	2680.7	2576.4
32.5°	2756.4	2767.4	2738.9	2669.7	2662.0	2735.6	2738.9	2788.2	2802.6	2750.9	2668.7
35°	2851.9	2865.1	2832.2	2724.6	2697.2	2771.8	2781.6	2839.9	2868.4	2825.5	2764.1
37.5°	3090.0	3051.6	3006.6	2835.5	2777.2	2828.9	2845.3	2913.4	2963.8	2914.5	2878.2
40°	3681.5	3560.7	3420.3	3024.2	2917.8	2950.7	2963.8	3031.8	3100.9	3052.7	3035.1
42.5°	4569.1	4426.6	4200.4	3458.7	3129.5	3145.9	3155.9	3215.1	3312.8	3274.4	3278.8
45°	5360.3	5308.8	5078.4	4200.4	3525.6	3444.4	3456.5	3487.3	3631.0	3616.7	3645.2
47.5°	5968.3	5938.6	5760.8	5052.0	4195.0	3809.8	3843.9	3858.1	4065.5	4116.0	4192.8
50°	6435.7	6424.7	6265.6	5809.1	5069.5	4348.6	4360.7	4329.9	4640.5	4765.6	4911.5
52.5°	6876.8	6914.1	6796.7	6512.5	6003.3	5054.2	5052.0	4907.2	5326.3	5515.0	5764.1
55°	7275.1	7288.3	7300.4	7230.1	6942.6	5857.4	5836.6	5599.6	6121.8	6317.2	6587.1
57.5°	7649.3	7654.8	7762.3	7906.0	7920.4	6719.9	6681.5	6397.2	6990.9	7130.3	7296.0
60°	7900.6	7925.8	8153.0	8552.4	8726.8	7609.8	7588.9	7299.2	7875.4	7940.1	7909.3
62.5°	7538.5	7692.1	8264.9	9057.1	9488.4	8596.3	8586.4	8314.3	8805.9	8753.2	8489.9
65°	6102.1	6362.2	7369.4	9398.4	10235.6	9697.9	9712.2	9422.5	9761.6	9590.4	8961.7
67.5°	4268.5	4542.8	5734.5	9425.8	11070.7	10991.7	11074.0	10619.7	10776.6	10392.6	9073.6
70°	2951.8	3093.3	3869.1	8835.5	11721.4	12773.7	12771.5	12090.1	11786.2	10758.0	8503.0
72.5°	1985.0	2058.5	2512.8	7009.6	11242.9	13832.6	13768.9	13213.7	12126.3	10061.2	6947.0
75°	837.2	891.0	1163.2	3939.3	8894.7	12655.2	12483.0	11677.5	10774.4	7922.5	4334.3
77.5°	265.6	288.6	458.7	1410.0	4899.5	9512.5	9330.4	7292.7	7221.3	3974.4	1584.5
80°	126.2	147.1	257.9	566.2	1927.9	5173.8	5148.6	3308.4	3106.5	1073.2	318.3
82.5°	54.8	64.8	142.7	302.9	862.4	1845.6	1882.9	1125.9	931.6	407.1	97.7
85°	17.5	23.1	65.8	139.4	364.3	458.7	453.2	267.7	375.3	221.6	34.0
87.5°	0.0	0.0	21.9	31.8	37.3	26.3	29.6	23.1	104.2	61.5	12.1
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°	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2	1761.2
2.5°	1770.0	1752.4	1721.7	1693.1	1667.9	1642.7	1627.3	1605.4	1603.2	1603.2	1608.6
5°	1782.1	1753.5	1698.6	1640.5	1573.6	1509.9	1446.3	1384.8	1365.1	1350.7	1357.4
7.5°	1817.1	1772.1	1685.4	1574.6	1447.3	1308.0	1210.3	1104.9	1064.4	1042.4	1045.7
10°	1867.7	1806.2	1674.4	1480.3	1274.0	1084.1	944.7	830.7	786.8	768.1	768.1
12.5°	1923.6	1847.9	1654.8	1362.8	1084.1	857.0	720.9	668.3	661.6	661.6	661.6
15°	1990.5	1898.3	1620.7	1224.6	885.5	678.1	629.9	632.0	638.7	643.0	643.0
17.5°	2059.6	1952.1	1566.9	1069.9	709.9	610.1	611.2	614.5	620.0	624.3	624.3
20°	2134.3	2005.8	1495.6	905.3	609.0	590.4	593.7	597.0	601.4	603.5	604.6
22.5°	2214.3	2056.4	1411.1	743.9	575.0	573.9	575.0	578.3	583.7	583.7	586.0
25°	2300.0	2112.3	1314.6	626.6	557.4	557.4	559.6	561.8	566.2	566.2	567.3
27.5°	2387.7	2163.9	1212.5	565.1	542.0	541.0	541.0	544.3	546.4	547.6	548.7
30°	2484.3	2224.2	1110.5	552.0	530.0	524.5	521.2	523.4	525.6	526.7	528.9
32.5°	2583.0	2282.4	1019.4	557.4	517.9	508.1	497.1	494.9	494.9	499.3	502.6
35°	2692.8	2346.0	949.1	576.0	511.4	483.9	466.4	456.4	457.6	464.1	467.4
37.5°	2824.5	2422.9	897.6	592.6	507.0	456.4	427.9	415.8	408.2	415.8	413.7
40°	2996.7	2535.8	860.3	605.7	501.4	424.7	386.2	366.5	352.2	356.6	354.4
42.5°	3250.2	2713.6	846.0	606.8	489.4	387.3	343.5	317.1	296.2	297.4	292.9
45°	3605.7	2994.5	919.5	592.6	463.1	346.8	298.5	263.3	250.2	246.9	242.5
47.5°	4092.9	3403.8	1089.6	562.9	424.7	307.3	254.6	225.0	215.0	209.6	206.3
50°	4745.9	3929.4	1278.4	530.0	386.2	270.0	218.3	199.7	193.1	187.7	186.5
52.5°	5503.0	4462.7	1433.1	497.1	347.9	237.0	195.4	184.4	178.9	174.5	173.3
55°	6197.6	4830.3	1424.3	462.0	310.6	210.6	178.9	172.3	165.7	161.3	159.1
57.5°	6629.9	4881.9	1174.1	423.5	267.7	189.8	163.5	159.1	151.4	146.0	144.8
60°	6828.6	4587.8	823.0	373.1	225.0	170.0	147.1	144.8	135.0	127.3	125.0
62.5°	6864.7	4041.4	548.7	310.6	187.7	151.4	130.6	127.3	114.1	101.0	94.4
65°	6717.6	3260.1	379.7	242.5	160.2	131.7	111.9	105.4	91.1	77.9	73.5
67.5°	6252.4	2288.9	264.4	174.5	136.0	104.2	88.9	86.7	75.7	64.8	61.5
70°	5399.8	1304.7	176.7	130.6	107.5	71.3	70.2	72.5	61.5	52.7	48.3
72.5°	4140.1	597.0	109.8	95.4	73.5	48.3	56.0	57.1	47.2	39.5	35.2
75°	2437.1	255.6	69.1	61.5	37.3	31.8	40.6	41.7	31.8	25.2	21.9
77.5°	829.5	96.6	43.9	36.2	18.7	17.5	26.3	26.3	17.5	9.8	7.7
80°	188.7	36.2	21.9	14.2	8.8	7.7	8.8	7.7	4.4	1.1	0.0
82.5°	53.8	14.2	8.8	5.5	3.3	3.3	1.1	0.0	0.0	0.0	0.0
85°	15.4	6.6	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)