

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: P968411

Luminaire Tested: **NAV-SB5B-830-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968411
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

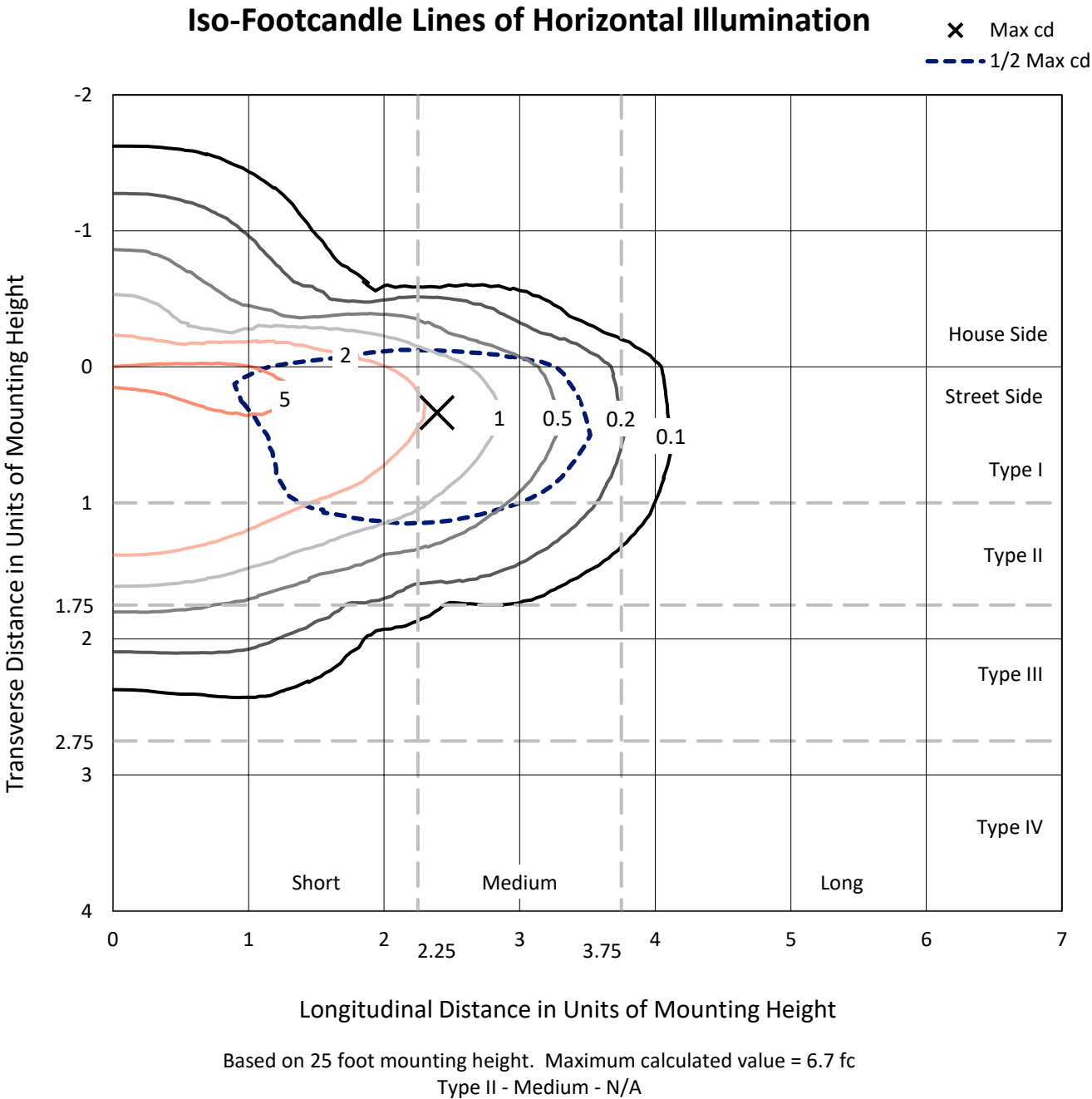
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19130.6 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

Input Watts (W): 182.7
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

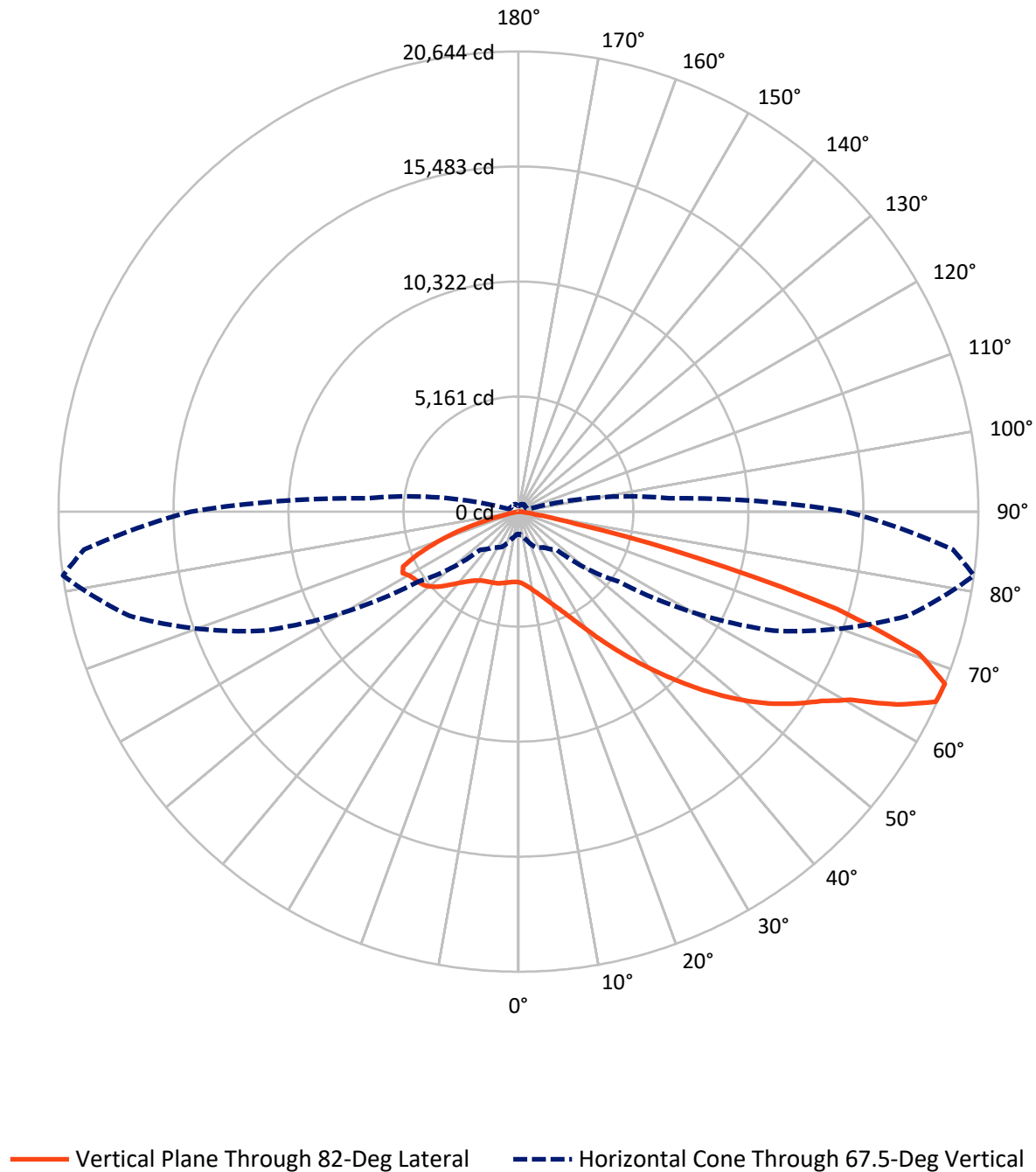


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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3465.3	0.0	3465.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	15665.3	0.0	15665.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	19130.6	0.0	19130.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.4	1.5
10°-20°	733.7	3.8
20°-30°	1175.2	6.1
30°-40°	2078.1	10.9
40°-50°	3641.1	19.0
50°-60°	4856.2	25.4
60°-70°	4520.9	23.6
70°-80°	1735.1	9.1
80°-90°	107.8	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°	19130.6	100.0
0°-180°	19130.6	100.0

Coefficient of Utilization



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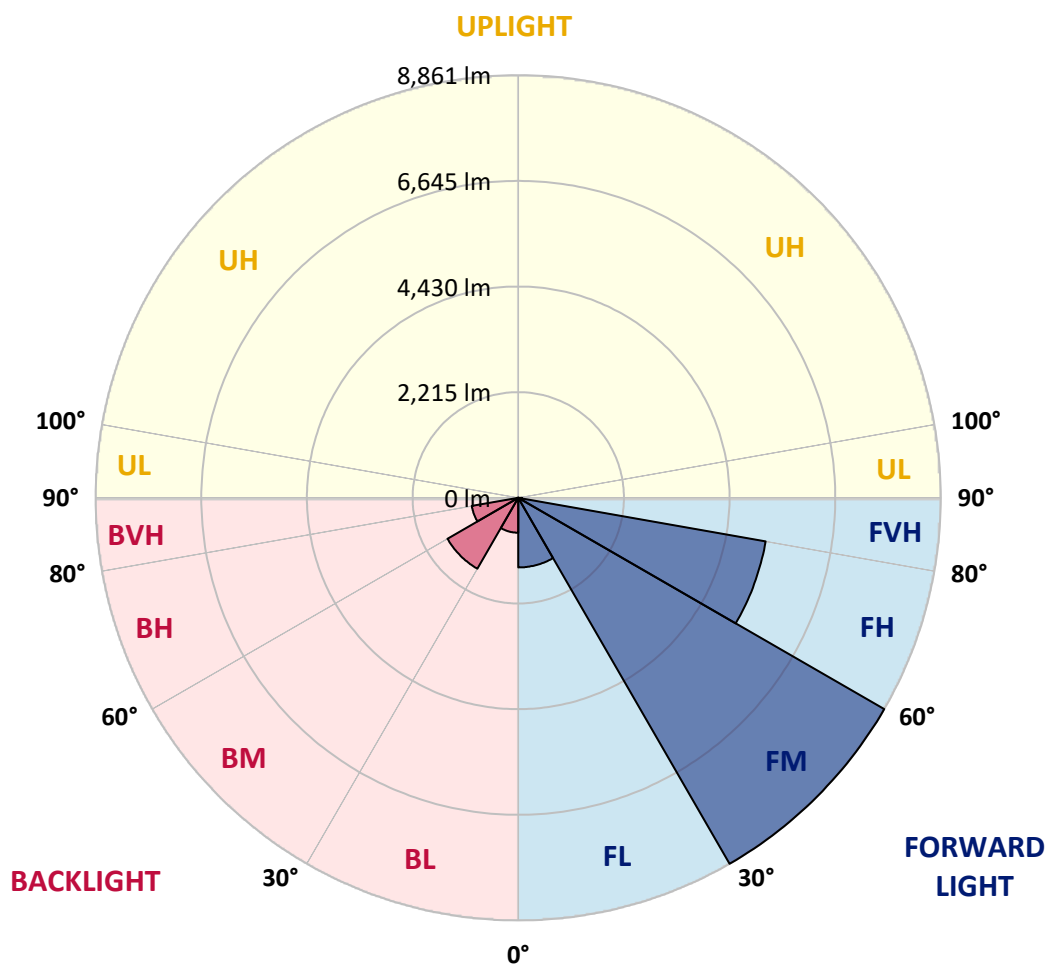
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1459.5	7.6			
FM	(30°-60°)	8860.5	46.3			
FH	(60°-80°)	5266.9	27.5			G3/7500
FVH	(80°-90°)	78.4	0.4			G1/100
BL	(0°-30°)	731.9	3.8	B2/1000		
BM	(30°-60°)	1715.0	9.0	B2/2500		
BH	(60°-80°)	989.1	5.2	B2/1000		G2/1000
BVH	(80°-90°)	29.4	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-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3
2.5°	3349.7	3369.0	3358.0	3352.5	3342.8	3329.1	3318.0	3283.6	3247.8	3224.3	3216.1
5°	3417.2	3436.5	3435.1	3440.6	3447.5	3451.7	3448.9	3410.4	3359.3	3319.5	3296.0
7.5°	3359.3	3381.4	3399.3	3426.9	3475.1	3526.0	3550.8	3542.6	3490.2	3435.1	3406.2
10°	3195.4	3218.9	3261.5	3326.3	3428.2	3538.4	3630.8	3673.4	3640.4	3579.7	3539.8
12.5°	2895.2	2918.6	3002.6	3143.2	3313.9	3505.4	3681.7	3796.0	3804.3	3743.6	3696.9
15°	2557.8	2581.2	2670.7	2847.0	3107.3	3414.5	3709.2	3925.4	3998.4	3946.1	3889.7
17.5°	2348.4	2369.1	2436.5	2578.4	2849.7	3232.6	3699.5	4063.2	4229.9	4188.6	4121.0
20°	2285.0	2303.0	2334.6	2433.8	2659.7	3043.9	3636.2	4192.7	4479.1	4455.8	4380.0
22.5°	2352.5	2369.1	2378.7	2422.8	2564.7	2920.0	3556.3	4324.9	4768.4	4771.2	4678.9
25°	2508.2	2524.7	2513.7	2541.2	2603.2	2881.4	3526.0	4480.6	5132.1	5162.3	5057.7
27.5°	2764.3	2765.8	2739.5	2738.2	2747.8	2939.3	3557.7	4647.1	5590.7	5647.1	5517.7
30°	3278.2	3257.4	3156.9	3048.0	2998.5	3112.8	3645.8	4844.2	6132.0	6232.5	6070.0
32.5°	4070.1	4039.7	3855.2	3594.9	3333.2	3392.4	3804.3	5068.6	6721.5	6903.3	6704.9
35°	4929.5	4921.3	4728.4	4341.4	3884.1	3790.4	4061.9	5363.4	7364.7	7654.0	7418.4
37.5°	5728.4	5724.3	5614.1	5158.2	4601.7	4345.6	4475.0	5749.1	8053.4	8472.1	8193.8
40°	6458.4	6470.8	6360.6	5952.9	5392.3	5057.7	5037.0	6225.6	8819.2	9363.3	9032.7
42.5°	7089.2	7103.0	6991.4	6689.8	6173.3	5845.5	5727.1	6809.7	9567.1	10320.5	9929.4
45°	7517.6	7603.0	7586.4	7345.5	6974.9	6634.7	6556.2	7542.4	10419.6	11335.6	10877.0
47.5°	7638.8	7717.3	7841.2	7874.4	7648.4	7313.8	7407.4	8425.3	11281.9	12352.1	11830.1
50°	7339.9	7412.9	7670.5	8013.4	8170.5	8067.2	8235.2	9371.5	12164.8	13365.9	12765.3
52.5°	6750.4	6824.8	7149.9	7692.5	8333.0	8658.1	9065.7	10304.0	13020.2	14325.9	13651.0
55°	5897.8	5976.4	6393.6	7008.0	8023.1	8901.8	9758.5	11235.1	13803.9	15189.5	14449.8
57.5°	4738.1	4796.0	5229.9	6089.3	7243.5	8659.4	10269.6	12251.6	14542.1	16037.9	15241.9
60°	3088.0	3139.0	3643.1	4601.7	5951.6	7849.6	10371.5	13385.2	15522.8	17141.2	16309.3
62.5°	2053.6	2088.0	2386.9	3090.8	4191.3	6294.5	9775.1	14290.0	16960.8	19061.2	18139.7
65°	1409.1	1443.5	1742.4	2232.7	2707.8	4163.8	8060.3	14170.2	18263.8	20585.9	19496.4
67.5°	1005.4	1034.4	1287.8	1750.6	1960.0	2418.6	5464.0	12638.6	18076.4	20643.8	19569.5
70°	720.4	736.9	946.3	1363.6	1557.8	1453.1	3038.4	9666.3	15827.2	19062.5	18079.2
72.5°	504.1	509.6	657.0	1038.5	1254.8	1060.6	1446.2	6444.7	11970.6	14962.2	14016.0
75°	341.6	348.5	442.1	761.7	1006.9	809.9	765.8	3455.8	7027.3	8282.0	7424.0
77.5°	209.4	212.1	285.2	520.6	753.4	617.0	493.1	1464.1	2718.9	2669.3	2275.4
80°	118.5	118.5	181.8	323.7	513.7	398.0	345.7	622.6	860.9	756.1	666.7
82.5°	66.1	67.4	132.2	201.1	340.2	235.5	190.0	287.8	371.9	329.2	286.5
85°	27.6	30.3	81.3	95.0	162.6	117.1	77.2	121.3	137.8	122.6	89.5
87.5°	2.8	4.1	24.8	17.9	19.3	23.4	11.1	23.4	19.3	19.3	13.7
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°	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3	3169.3
2.5°	3189.9	3169.3	3116.9	3056.3	2976.5	2937.9	2885.6	2849.7	2819.5	2822.2	2794.7
5°	3251.9	3199.6	3082.5	2936.5	2754.7	2625.2	2487.5	2392.5	2315.4	2298.8	2261.7
7.5°	3337.3	3254.7	3049.5	2786.4	2479.3	2246.5	2038.5	1904.9	1809.8	1779.5	1749.3
10°	3447.5	3327.7	3006.7	2597.7	2155.6	1859.5	1636.3	1531.7	1466.9	1444.8	1428.3
12.5°	3575.6	3411.7	2950.3	2367.6	1822.2	1537.1	1395.2	1343.0	1322.2	1315.4	1311.3
15°	3736.7	3516.4	2864.9	2095.0	1539.9	1340.2	1279.6	1272.6	1275.4	1272.6	1271.3
17.5°	3928.2	3630.8	2725.8	1813.9	1349.8	1239.6	1217.6	1223.1	1230.0	1228.6	1225.8
20°	4137.6	3743.6	2548.1	1564.7	1220.4	1168.0	1155.6	1161.1	1166.7	1163.9	1162.5
22.5°	4375.8	3864.9	2351.1	1370.4	1133.5	1101.9	1088.1	1089.5	1089.5	1083.9	1081.3
25°	4661.0	3998.4	2144.5	1232.8	1067.4	1042.6	1026.1	1020.6	1012.4	995.8	993.1
27.5°	5001.2	4140.3	1946.2	1136.3	1015.2	991.7	972.4	958.7	938.0	910.4	907.6
30°	5384.1	4312.5	1778.2	1075.7	973.7	950.4	928.3	907.6	877.4	843.0	840.2
32.5°	5834.5	4497.1	1655.6	1035.8	936.6	911.8	885.6	860.9	827.8	793.3	794.7
35°	6371.6	4720.2	1583.9	1008.2	907.6	874.6	845.7	818.2	793.3	763.0	760.3
37.5°	6954.2	4957.1	1561.9	994.5	888.4	837.4	804.4	785.0	782.4	764.4	763.0
40°	7592.0	5238.1	1578.4	986.2	867.8	801.7	765.8	761.7	768.5	736.9	738.3
42.5°	8266.9	5571.4	1606.0	976.5	838.9	765.8	731.3	731.3	725.9	681.8	681.8
45°	8996.8	5955.7	1633.5	953.1	804.4	730.0	703.9	694.2	670.8	628.1	626.7
47.5°	9732.4	6346.8	1654.2	910.4	763.0	699.7	676.3	654.3	619.8	581.3	579.8
50°	10430.7	6698.1	1632.2	847.1	716.3	670.8	646.0	615.7	578.5	552.3	548.2
52.5°	11054.6	7002.5	1538.5	772.6	666.7	640.4	618.4	586.7	556.5	528.9	526.1
55°	11597.4	7249.0	1373.2	702.4	622.6	614.3	592.2	552.3	511.0	487.6	484.8
57.5°	12118.0	7436.4	1166.7	644.6	582.6	585.4	552.3	516.5	478.0	453.2	450.4
60°	12810.8	7687.0	957.2	590.9	540.0	548.2	512.4	486.2	438.0	406.3	402.2
62.5°	13918.2	8076.8	760.3	524.8	490.4	493.1	478.0	446.3	388.4	351.3	348.5
65°	14796.9	7933.6	599.1	453.2	433.9	438.0	438.0	403.5	341.6	298.9	294.8
67.5°	14697.8	6793.1	478.0	382.9	380.2	382.9	392.6	363.7	303.0	268.5	263.1
70°	13539.4	5403.4	382.9	318.2	330.6	323.7	351.3	331.9	272.8	238.3	234.1
72.5°	11047.8	3892.4	292.0	263.1	253.5	264.4	316.8	298.9	227.2	188.7	184.6
75°	6455.7	2077.1	217.6	208.0	183.2	220.4	281.0	254.8	173.5	139.1	135.0
77.5°	2101.9	724.5	159.8	152.9	136.3	177.6	239.6	214.8	141.9	110.2	106.1
80°	563.3	219.0	108.9	100.6	88.1	132.2	190.0	170.8	101.9	71.6	70.2
82.5°	225.9	92.2	63.3	56.5	48.2	90.9	150.2	137.8	75.7	45.4	45.4
85°	73.0	30.3	23.4	17.9	22.0	56.5	89.5	93.7	53.7	23.4	17.9
87.5°	9.6	4.1	4.1	5.5	4.1	9.6	27.6	26.1	15.2	2.8	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)