

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: P883996

Luminaire Tested: **NAV-SB4C-835-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883996
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-SB4C-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 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: 18700 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

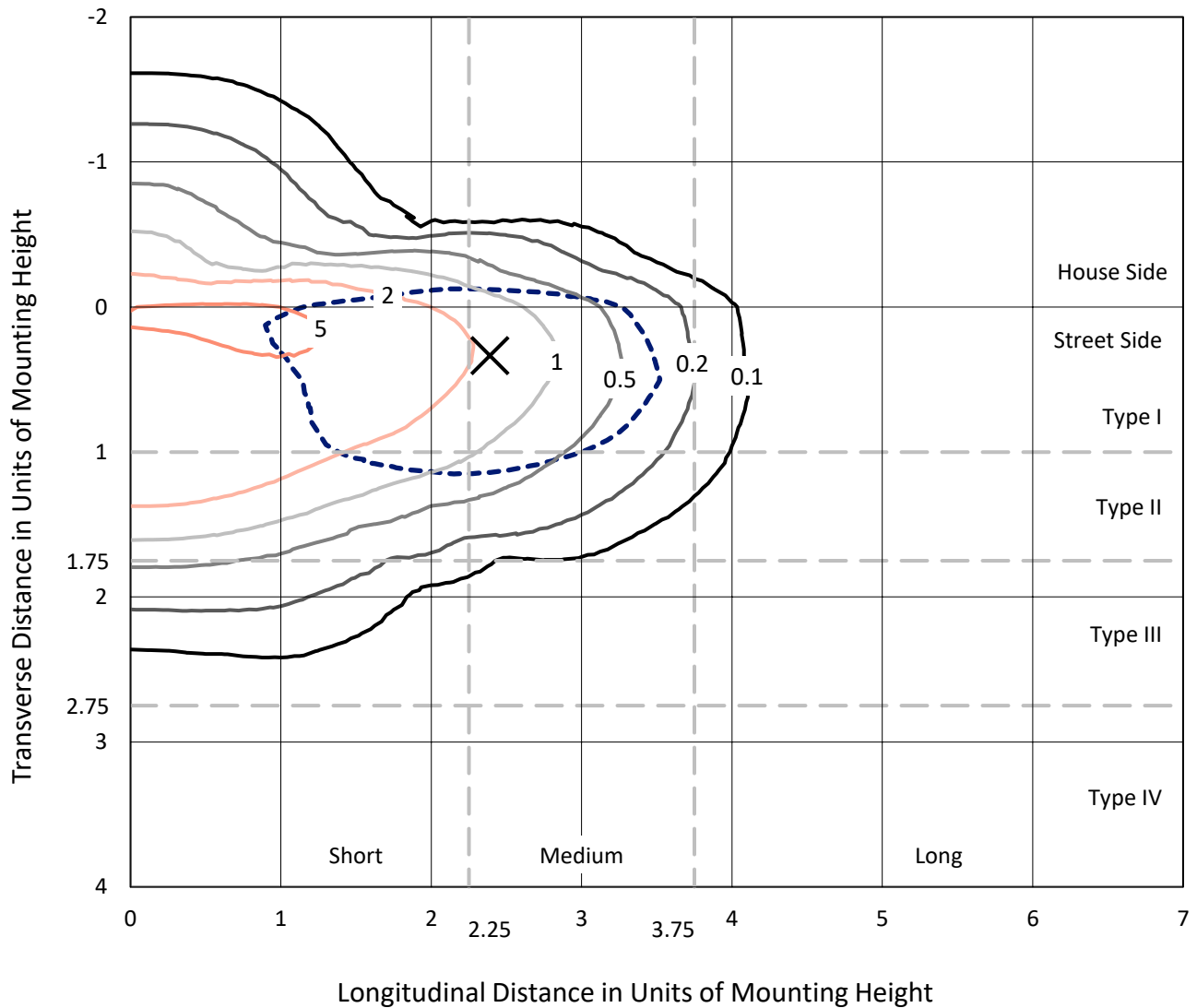
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883996
 CATALOG NUMBER: NAV-SB4C-835-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

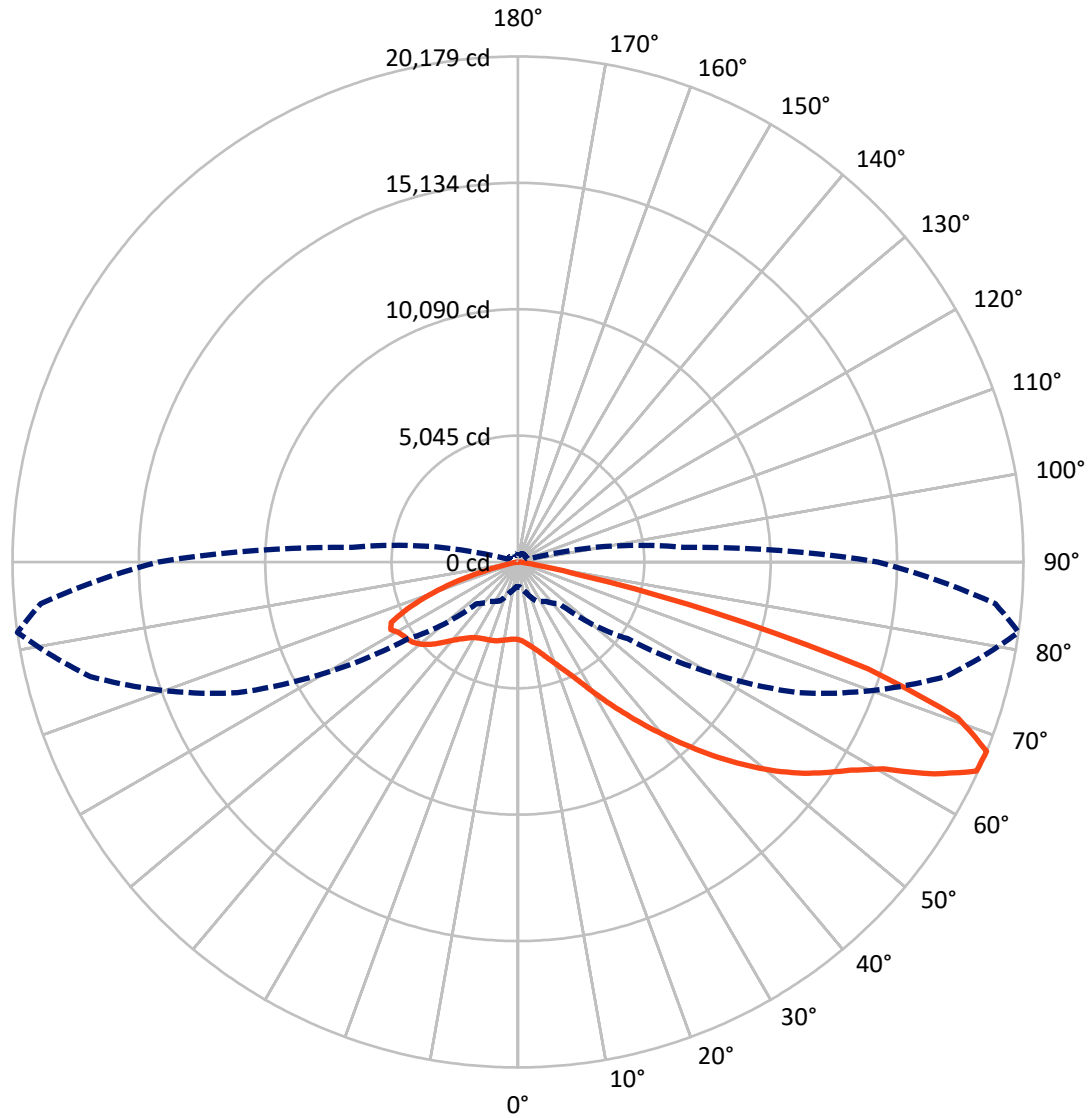
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Medium - N/A

REPORT NUMBER: P883996
CATALOG NUMBER: NAV-SB4C-835-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P883996
 CATALOG NUMBER: NAV-SB4C-835-U-T2-HSS

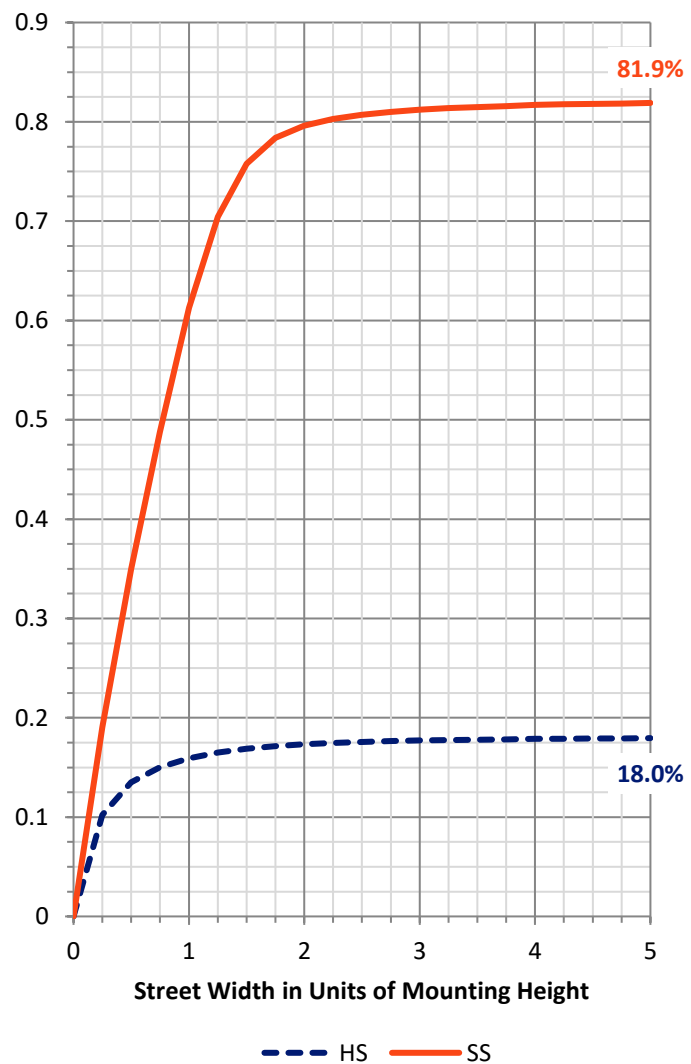
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3387.3	0.0	3387.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	15312.7	0.0	15312.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	18700.0	0.0	18700.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.0	1.5
10°-20°	717.2	3.8
20°-30°	1148.8	6.1
30°-40°	2031.4	10.9
40°-50°	3559.2	19.0
50°-60°	4746.9	25.4
60°-70°	4419.1	23.6
70°-80°	1696.1	9.1
80°-90°	105.3	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°	18700.0	100.0
0°-180°	18700.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883996

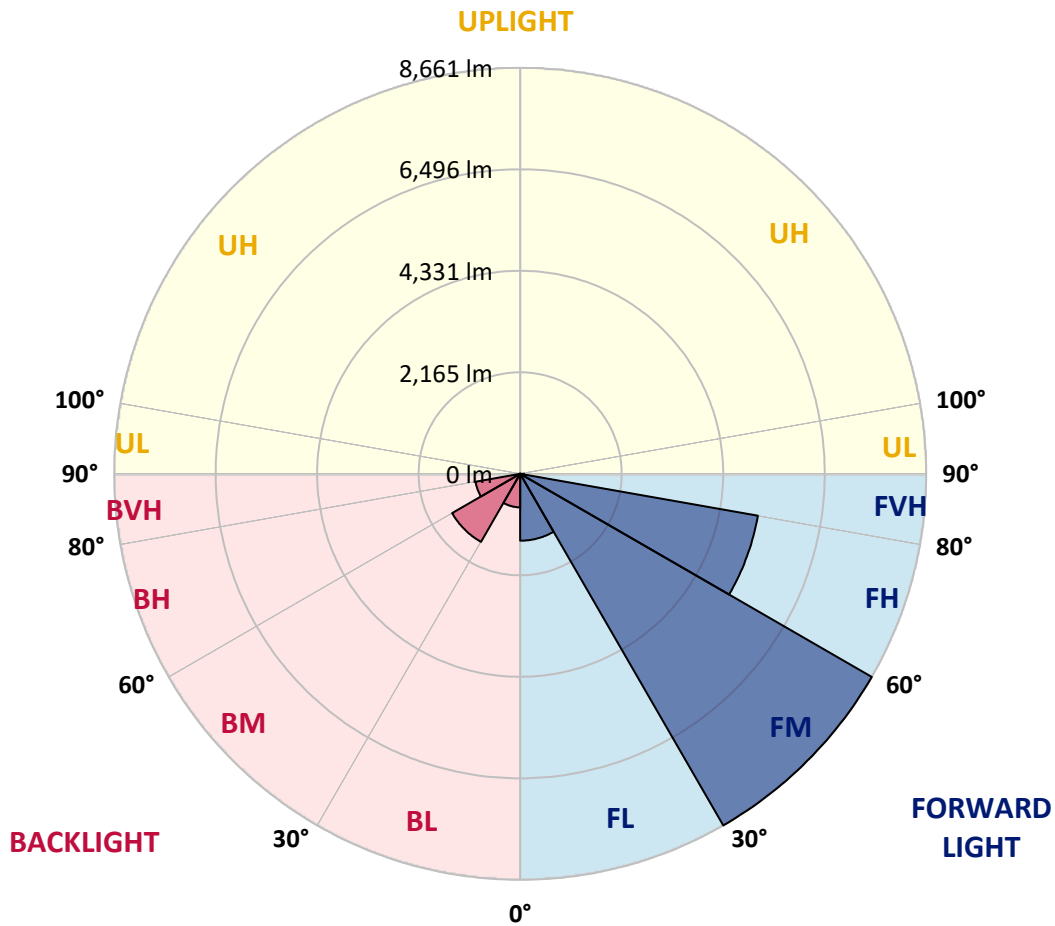
CATALOG NUMBER: NAV-SB4C-835-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1426.6	7.6			
FM (30°-60°)	8661.1	46.3			
FH (60°-80°)	5148.4	27.5			G3/7500
FVH (80°-90°)	76.6	0.4			G1/100
BL (0°-30°)	715.4	3.8	B2/1000		
BM (30°-60°)	1676.4	9.0	B2/2500		
BH (60°-80°)	966.8	5.2	B2/1000		G2/1000
BVH (80°-90°)	28.8	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



REPORT NUMBER: P883996
 CATALOG NUMBER: NAV-SB4C-835-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0
2.5°	3274.3	3293.2	3282.4	3277.0	3267.6	3254.1	3243.4	3209.7	3174.7	3151.8	3143.7
5°	3340.3	3359.1	3357.8	3363.2	3369.9	3374.0	3371.3	3333.6	3283.8	3244.7	3221.8
7.5°	3283.8	3305.3	3322.8	3349.7	3396.8	3446.7	3470.9	3462.8	3411.7	3357.8	3329.5
10°	3123.5	3146.4	3188.2	3251.4	3351.1	3458.8	3549.0	3590.7	3558.4	3499.2	3460.1
12.5°	2830.0	2852.9	2935.0	3072.4	3239.3	3426.5	3598.8	3710.5	3718.6	3659.4	3613.6
15°	2500.2	2523.1	2610.6	2782.9	3037.4	3337.6	3625.7	3837.1	3908.5	3857.3	3802.1
17.5°	2295.5	2315.7	2381.7	2520.4	2785.6	3159.9	3616.3	3971.7	4134.6	4094.3	4028.3
20°	2233.6	2251.1	2282.1	2379.0	2599.8	2975.4	3554.4	4098.3	4378.3	4355.5	4281.4
22.5°	2299.6	2315.7	2325.2	2368.2	2506.9	2854.3	3476.3	4227.5	4661.1	4663.8	4573.6
25°	2451.7	2467.9	2457.1	2484.0	2544.6	2816.6	3446.7	4379.7	5016.5	5046.1	4943.8
27.5°	2702.1	2703.5	2677.9	2676.5	2686.0	2873.1	3477.6	4542.6	5464.8	5520.0	5393.5
30°	3204.3	3184.1	3085.8	2979.5	2931.0	3042.8	3563.8	4735.1	5994.0	6092.2	5933.4
32.5°	3978.5	3948.9	3768.4	3514.0	3258.2	3316.1	3718.6	4954.6	6570.2	6747.9	6554.0
35°	4818.6	4810.5	4622.0	4243.7	3796.7	3705.2	3970.4	5242.7	7198.9	7481.7	7251.5
37.5°	5599.5	5595.4	5487.7	5042.1	4498.2	4247.7	4374.3	5619.7	7872.1	8281.4	8009.5
40°	6313.0	6325.2	6217.5	5818.9	5271.0	4943.8	4923.6	6085.5	8620.7	9152.5	8829.4
42.5°	6929.7	6943.1	6834.1	6539.2	6034.4	5713.9	5598.1	6656.4	9351.8	10088.2	9705.9
45°	7348.4	7431.9	7415.7	7180.1	6817.9	6485.4	6408.6	7372.6	10185.2	11080.5	10632.1
47.5°	7466.9	7543.6	7664.8	7697.1	7476.3	7149.1	7240.7	8235.6	11028.0	12074.1	11563.8
50°	7174.7	7246.1	7497.8	7833.1	7986.6	7885.6	8049.8	9160.6	11891.0	13065.0	12478.0
52.5°	6598.5	6671.2	6988.9	7519.4	8145.4	8463.2	8861.7	10072.1	12727.1	14003.4	13343.7
55°	5765.1	5841.8	6249.8	6850.2	7842.5	8701.5	9538.9	10982.2	13493.1	14847.6	14124.6
57.5°	4631.5	4688.0	5112.1	5952.2	7080.5	8464.5	10038.4	11975.8	14214.8	15676.9	14898.7
60°	3018.5	3068.3	3561.1	4498.2	5817.6	7672.9	10138.0	13083.9	15173.4	16755.4	15942.2
62.5°	2007.4	2041.1	2333.2	3021.2	4097.0	6152.8	9555.1	13968.4	16579.0	18632.2	17731.5
65°	1377.3	1411.0	1703.1	2182.4	2646.9	4070.0	7878.9	13851.3	17852.6	20122.6	19057.6
67.5°	982.8	1011.1	1258.8	1711.2	1915.9	2364.2	5341.0	12354.1	17669.5	20179.1	19129.0
70°	704.1	720.3	924.9	1332.9	1522.7	1420.4	2970.1	9448.7	15470.9	18633.5	17672.2
72.5°	492.8	498.2	642.2	1015.1	1226.5	1036.7	1413.7	6299.6	11701.1	14625.4	13700.5
75°	333.9	340.6	432.2	744.5	984.2	791.7	748.6	3378.0	6869.1	8095.6	7256.8
77.5°	204.6	207.3	278.7	508.9	736.5	603.2	482.0	1431.2	2657.7	2609.2	2224.2
80°	115.8	115.8	177.7	316.4	502.2	389.1	337.9	608.6	841.5	739.1	651.6
82.5°	64.6	66.0	129.2	196.6	332.5	230.2	185.8	281.4	363.5	321.8	280.0
85°	26.9	29.6	79.4	92.9	158.9	114.4	75.4	118.5	134.6	119.8	87.5
87.5°	2.7	4.0	24.2	17.5	18.8	22.9	10.8	22.9	18.8	18.8	13.5
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: P883996

CATALOG NUMBER: NAV-SB4C-835-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0	3098.0
2.5°	3118.2	3098.0	3046.8	2987.6	2909.5	2871.8	2820.6	2785.6	2756.0	2758.7	2731.7
5°	3178.7	3127.6	3013.1	2870.4	2692.7	2566.1	2431.5	2338.6	2263.2	2247.1	2210.7
7.5°	3262.2	3181.4	2980.8	2723.7	2423.4	2195.9	1992.6	1862.0	1769.1	1739.5	1709.9
10°	3369.9	3252.8	2939.1	2539.2	2107.0	1817.6	1599.5	1497.1	1433.9	1412.3	1396.2
12.5°	3495.1	3334.9	2883.9	2314.4	1781.2	1502.5	1363.9	1312.7	1292.5	1285.8	1281.7
15°	3652.7	3437.2	2800.4	2047.8	1505.2	1310.0	1250.8	1244.0	1246.7	1244.0	1242.7
17.5°	3839.8	3549.0	2664.4	1773.1	1319.4	1211.7	1190.2	1195.6	1202.3	1200.9	1198.3
20°	4044.4	3659.4	2490.8	1529.5	1192.9	1141.7	1129.6	1135.0	1140.4	1137.7	1136.3
22.5°	4277.4	3777.9	2298.2	1339.6	1108.0	1077.1	1063.6	1065.0	1065.0	1059.6	1056.9
25°	4556.1	3908.5	2096.3	1205.0	1043.4	1019.2	1003.0	997.6	989.6	973.4	970.7
27.5°	4888.6	4047.1	1902.4	1110.7	992.3	969.4	950.5	937.1	916.9	889.9	887.2
30°	5262.9	4215.4	1738.1	1051.5	951.9	929.0	907.4	887.2	857.6	824.0	821.3
32.5°	5703.1	4395.8	1618.3	1012.5	915.5	891.3	865.7	841.5	809.2	775.5	776.8
35°	6228.2	4614.0	1548.3	985.5	887.2	854.9	826.7	799.7	775.5	745.9	743.2
37.5°	6797.7	4845.5	1526.8	972.1	868.4	818.6	786.3	767.4	764.7	747.2	745.9
40°	7421.1	5120.2	1542.9	964.0	848.2	783.6	748.6	744.5	751.3	720.3	721.6
42.5°	8080.8	5446.0	1569.8	954.6	819.9	748.6	714.9	714.9	709.5	666.4	666.4
45°	8794.4	5821.6	1596.8	931.7	786.3	713.6	688.0	678.6	655.7	613.9	612.6
47.5°	9513.3	6204.0	1617.0	889.9	745.9	683.9	661.1	639.5	605.9	568.2	566.8
50°	10195.9	6547.3	1595.4	828.0	700.1	655.7	631.4	601.8	565.5	539.9	535.8
52.5°	10805.8	6844.9	1503.9	755.3	651.6	626.1	604.5	573.5	543.9	517.0	514.3
55°	11336.3	7085.9	1342.3	686.6	608.6	600.5	578.9	539.9	499.5	476.6	473.9
57.5°	11845.2	7269.0	1140.4	630.1	569.5	572.2	539.9	504.9	467.2	442.9	440.3
60°	12522.4	7514.0	935.7	577.6	527.8	535.8	500.8	475.3	428.1	397.2	393.1
62.5°	13604.9	7895.0	743.2	513.0	479.3	482.0	467.2	436.2	379.7	343.3	340.6
65°	14463.9	7755.0	585.7	442.9	424.1	428.1	428.1	394.5	333.9	292.2	288.1
67.5°	14366.9	6640.2	467.2	374.3	371.6	374.3	383.7	355.4	296.2	262.5	257.2
70°	13234.6	5281.7	374.3	311.0	323.1	316.4	343.3	324.5	266.6	232.9	228.9
72.5°	10799.1	3804.8	285.4	257.2	247.7	258.5	309.7	292.2	222.1	184.5	180.4
75°	6310.4	2030.3	212.7	203.3	179.1	215.4	274.7	249.1	169.6	136.0	131.9
77.5°	2054.5	708.2	156.2	149.4	133.3	173.7	234.3	210.0	138.7	107.7	103.7
80°	550.7	214.1	106.4	98.3	86.2	129.2	185.8	166.9	99.6	70.0	68.7
82.5°	220.8	90.2	61.9	55.2	47.1	88.9	146.8	134.6	74.0	44.4	44.4
85°	71.4	29.6	22.9	17.5	21.5	55.2	87.5	91.6	52.5	22.9	17.5
87.5°	9.4	4.0	4.0	5.4	4.0	9.4	26.9	25.6	14.8	2.7	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)