

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: P962925

Luminaire Tested: **NAV-SB2D-727-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962925
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-727-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16381.5 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

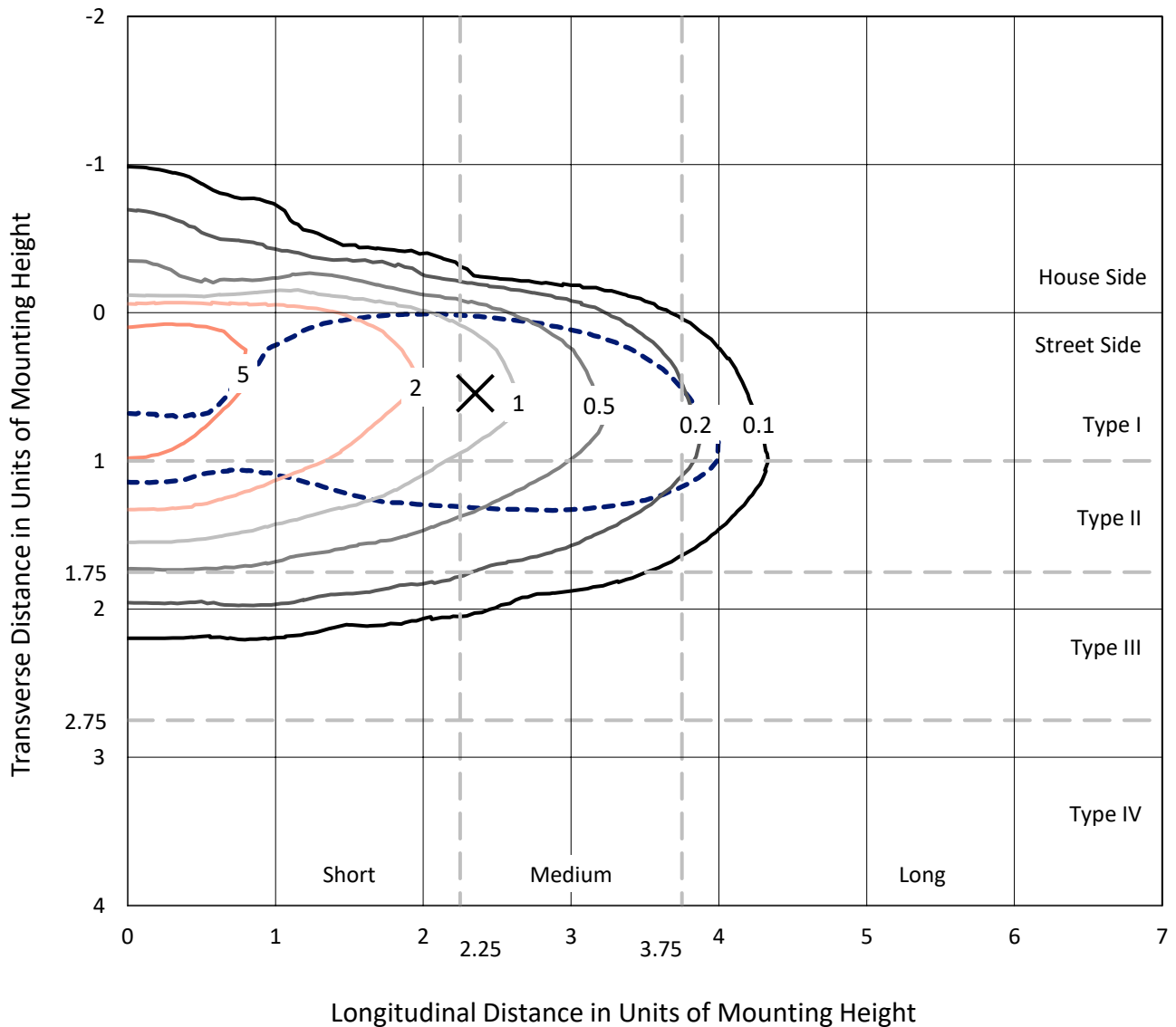
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P962925
 CATALOG NUMBER: NAV-SB2D-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

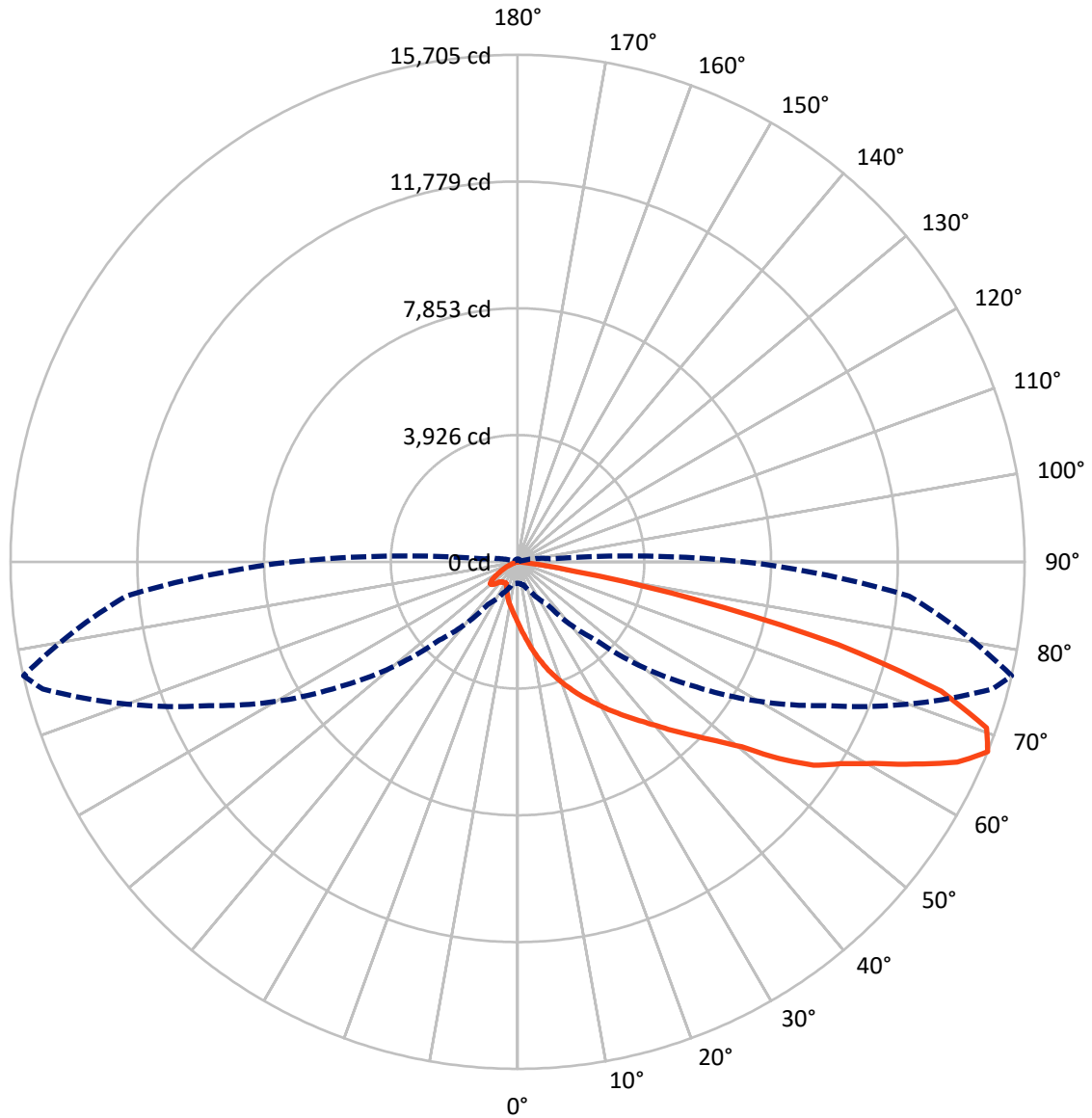
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Medium - N/A

REPORT NUMBER: P962925
CATALOG NUMBER: NAV-SB2D-727-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P962925
 CATALOG NUMBER: NAV-SB2D-727-U-T2R-HSS

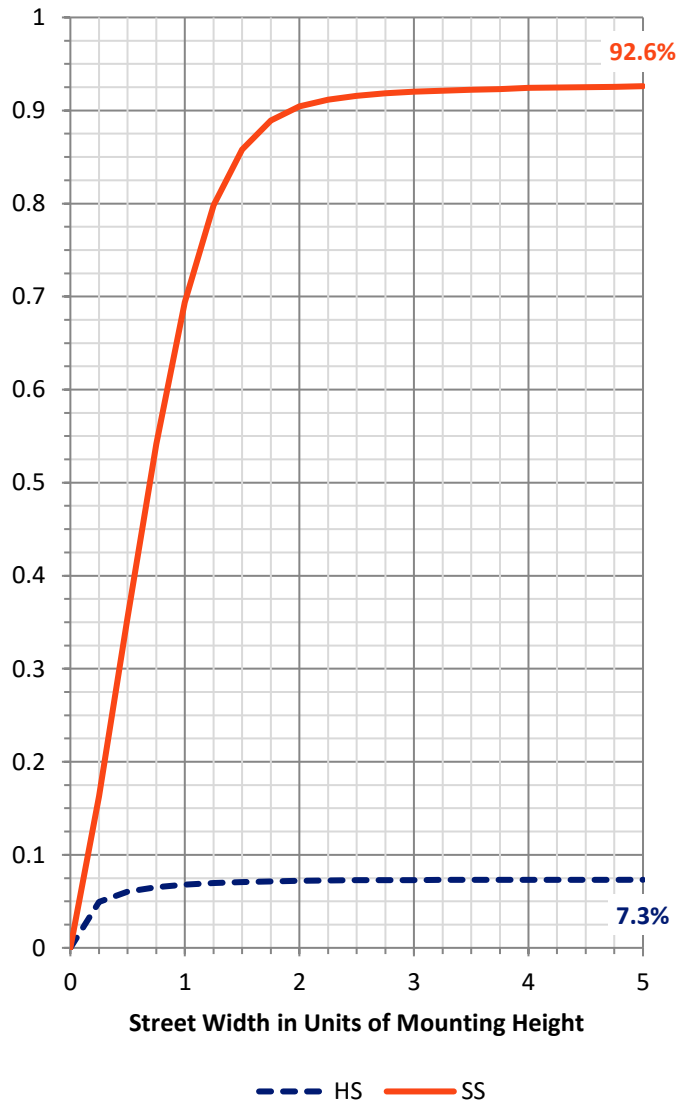
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1205.2	0.0	1205.2
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	15176.4	0.0	15176.4
	% Fixture	92.6	0.0	92.6
Total	Lumens	16381.5	0.0	16381.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.8	1.2
10°-20°	675.2	4.1
20°-30°	1302.9	8.0
30°-40°	2262.0	13.8
40°-50°	3284.2	20.0
50°-60°	3771.5	23.0
60°-70°	3274.4	20.0
70°-80°	1542.3	9.4
80°-90°	76.3	0.5
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°	16381.5	100.0
0°-180°	16381.5	100.0

Coefficient of Utilization

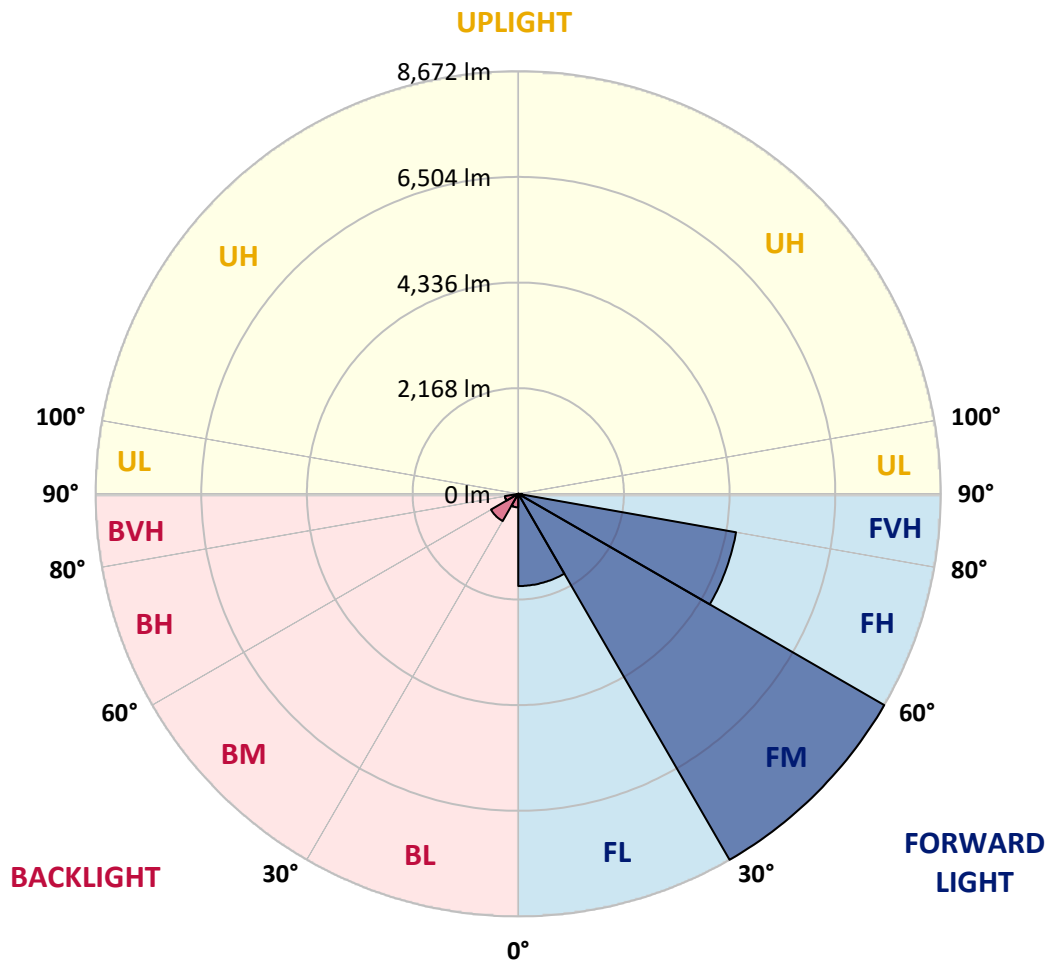


REPORT NUMBER: P962925
 CATALOG NUMBER: NAV-SB2D-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1891.9	11.5			
FM (30°-60°)	8671.9	52.9			
FH (60°-80°)	4537.6	27.7			G2/5000
FVH (80°-90°)	74.9	0.5			G1/100
BL (0°-30°)	279.0	1.7	B1/500		
BM (30°-60°)	645.8	3.9	B1/1000		
BH (60°-80°)	279.0	1.7	B1/500		G1/500
BVH (80°-90°)	1.4	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-G2
 Type II Medium



REPORT NUMBER: P962925
 CATALOG NUMBER: NAV-SB2D-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1
2.5°	2615.4	2631.6	2608.2	2563.4	2496.3	2452.6	2345.8	2245.1	2133.1	2097.6	1985.6
5°	3188.1	3202.3	3175.9	3127.1	3037.5	2952.1	2811.7	2601.1	2382.4	2312.2	2113.9
7.5°	3612.3	3620.4	3610.3	3565.5	3480.0	3383.4	3226.7	2977.5	2653.0	2575.7	2271.5
10°	3917.4	3943.9	3940.8	3923.5	3866.6	3788.2	3621.4	3337.6	2956.1	2856.5	2449.5
12.5°	4119.9	4149.4	4166.6	4205.3	4202.3	4152.4	4005.9	3705.9	3258.3	3141.3	2649.9
15°	4178.8	4210.4	4276.5	4366.0	4445.4	4470.8	4368.0	4067.0	3590.9	3441.3	2855.4
17.5°	4145.3	4194.1	4273.4	4414.9	4588.8	4703.7	4692.6	4415.9	3893.1	3722.1	3056.9
20°	4219.5	4266.4	4328.4	4447.4	4649.8	4858.4	4941.8	4749.5	4193.1	4014.1	3268.4
22.5°	4630.5	4622.3	4628.5	4647.9	4768.9	4975.3	5147.2	5052.6	4490.1	4307.0	3492.2
25°	5281.5	5244.9	5182.9	5078.2	5047.6	5147.2	5326.3	5321.2	4803.5	4607.2	3721.1
27.5°	6028.2	6022.1	5876.6	5624.4	5482.0	5443.3	5528.7	5582.7	5113.7	4904.1	3951.0
30°	6743.4	6759.7	6563.3	6282.5	6021.1	5869.6	5792.2	5830.9	5429.0	5224.6	4188.0
32.5°	7366.0	7383.2	7169.6	6841.1	6517.6	6334.4	6171.6	6076.0	5772.9	5550.1	4448.4
35°	7891.8	7909.1	7663.9	7300.8	6956.0	6790.1	6606.0	6344.5	6118.7	5911.3	4738.4
37.5°	8361.7	8356.7	8028.1	7662.0	7323.2	7191.9	7095.4	6675.2	6474.8	6274.4	5059.8
40°	8639.5	8660.8	8380.1	7976.2	7647.7	7552.1	7545.9	7085.1	6885.7	6691.5	5411.8
42.5°	8720.9	8758.5	8555.1	8223.5	7925.4	7821.7	7981.4	7528.6	7363.9	7174.7	5809.5
45°	8574.4	8611.0	8518.5	8288.6	8114.6	8047.5	8355.7	7988.4	7874.6	7687.4	6258.1
47.5°	8147.1	8192.9	8215.3	8166.5	8164.4	8232.6	8691.4	8472.6	8480.8	8289.6	6777.9
50°	7320.1	7397.4	7602.9	7775.9	8043.4	8379.1	9017.9	8997.6	9164.4	8999.6	7455.4
52.5°	5816.7	5926.5	6634.5	7107.6	7708.7	8351.6	9377.0	9839.9	10363.8	10122.7	8410.6
55°	4674.3	4674.3	5250.0	6135.0	7055.7	8170.6	9533.6	10387.1	11180.6	11123.6	9083.0
57.5°	3810.6	3856.4	4223.6	5005.9	6110.6	7739.3	9630.3	10730.9	11838.7	11797.0	9740.2
60°	2351.9	2450.6	3144.3	3916.4	5035.4	6971.2	9569.3	11078.9	12637.3	12670.8	10531.6
62.5°	1324.5	1361.1	1670.3	2817.8	3915.4	5938.7	9102.3	11273.2	13658.6	13801.0	11347.5
65°	914.5	932.9	1051.9	1753.8	2714.0	4728.2	8189.9	11152.1	14682.0	14969.8	12039.1
67.5°	664.3	673.4	747.6	1071.1	1610.3	3428.1	6759.7	10541.7	15224.1	15705.4	12171.4
70°	510.7	516.8	570.7	704.0	951.1	2115.9	4909.2	9328.2	14831.5	15406.3	11493.9
72.5°	415.0	421.2	462.9	520.8	630.7	1251.2	2975.5	7575.5	13098.1	13718.6	9785.0
75°	349.9	358.0	395.8	433.4	494.4	803.6	1395.6	5275.5	9850.0	10257.0	6804.4
77.5°	194.3	179.1	321.4	359.1	417.1	508.6	653.0	3104.6	5516.5	5629.5	3019.2
80°	121.1	125.2	255.3	288.9	320.4	256.4	299.1	1195.3	1912.4	1816.8	585.0
82.5°	7.1	16.3	196.3	208.6	219.8	109.9	113.0	405.9	460.8	423.2	103.7
85°	0.0	0.0	89.5	72.3	76.3	31.6	32.6	94.6	62.0	67.1	20.3
87.5°	0.0	0.0	0.0	2.0	0.0	3.1	6.1	8.1	3.1	4.1	7.1
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: P962925
 CATALOG NUMBER: NAV-SB2D-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1	1889.1
2.5°	1914.5	1843.3	1698.8	1557.4	1442.5	1335.7	1259.3	1187.2	1150.5	1148.5	1146.5
5°	1972.4	1823.0	1534.0	1278.7	1073.2	908.4	801.6	725.3	686.6	673.4	671.4
7.5°	2053.8	1829.0	1389.6	1034.5	792.4	651.1	590.0	565.6	557.5	548.3	546.2
10°	2156.6	1843.3	1260.3	833.1	624.6	553.4	529.0	518.8	512.7	506.6	504.5
12.5°	2271.5	1856.5	1132.2	691.8	549.3	512.7	495.4	483.2	475.1	467.9	465.9
15°	2383.4	1864.6	999.0	593.1	510.7	481.1	462.9	449.7	438.4	430.3	429.3
17.5°	2494.3	1875.9	873.8	534.0	479.1	449.7	431.3	415.0	405.9	396.8	395.8
20°	2617.3	1873.8	755.8	492.3	447.6	418.1	398.7	383.5	374.3	364.2	363.2
22.5°	2731.3	1863.6	652.1	456.7	415.0	386.5	365.2	349.9	340.8	332.6	331.6
25°	2862.5	1855.5	565.6	424.1	384.5	356.1	332.6	318.4	308.2	301.1	300.1
27.5°	2988.7	1843.3	502.6	394.7	355.1	327.6	305.1	288.9	279.7	274.7	274.7
30°	3112.8	1840.2	479.1	366.2	328.6	301.1	278.7	263.4	256.4	254.3	253.3
32.5°	3262.4	1848.4	489.3	356.1	304.1	276.6	255.3	244.2	237.0	237.0	237.0
35°	3422.1	1846.3	504.5	365.2	287.9	252.3	236.0	228.9	221.8	221.8	221.8
37.5°	3622.5	1849.4	516.8	380.5	281.8	232.0	222.7	213.6	209.5	209.5	209.5
40°	3921.5	1950.1	510.7	393.7	279.7	217.7	199.4	196.3	193.3	193.3	193.3
42.5°	4287.7	2168.8	518.8	394.7	278.7	207.6	183.1	189.2	182.0	181.1	180.1
45°	4688.6	2407.8	570.7	373.3	277.7	202.4	175.0	182.0	170.9	170.9	170.9
47.5°	5086.3	2644.8	623.6	342.9	274.7	201.4	167.9	163.8	160.7	161.7	161.7
50°	5634.5	2838.1	643.9	301.1	267.5	199.4	154.7	155.6	153.6	155.6	155.6
52.5°	6231.7	2878.8	619.5	254.3	247.2	193.3	145.4	149.5	148.5	150.6	150.6
55°	6604.0	2835.0	511.7	211.6	215.7	168.8	136.3	144.4	144.4	144.4	144.4
57.5°	6988.6	2648.9	363.2	171.9	179.1	138.4	128.1	139.4	138.4	137.4	137.4
60°	7265.2	2347.8	239.0	141.3	142.4	114.0	119.0	131.2	130.2	125.2	125.2
62.5°	7471.7	2015.2	153.6	120.0	108.9	102.7	108.9	119.0	114.9	103.7	101.7
65°	7448.3	1554.3	118.0	102.7	89.5	89.5	94.6	103.7	91.5	73.3	71.2
67.5°	7014.0	1051.9	97.7	86.5	75.2	74.2	78.3	86.5	78.3	62.0	60.1
70°	6237.7	687.7	78.3	67.1	60.1	54.9	63.0	74.2	66.1	49.8	47.8
72.5°	5062.9	419.1	59.0	48.8	43.8	35.6	49.8	61.0	52.9	36.6	34.5
75°	3275.6	213.6	40.7	31.6	23.4	21.3	36.6	45.8	36.6	22.3	19.4
77.5°	1253.3	89.5	22.3	14.2	12.2	10.1	20.3	27.5	15.3	5.1	4.1
80°	241.1	37.6	11.2	7.1	6.1	4.1	3.1	2.0	0.0	0.0	0.0
82.5°	41.7	12.2	4.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.2	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.1	0.0	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)