

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: P961969

Luminaire Tested: **NAV-SB2B-740-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961969
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-740-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9577.6 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.9
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

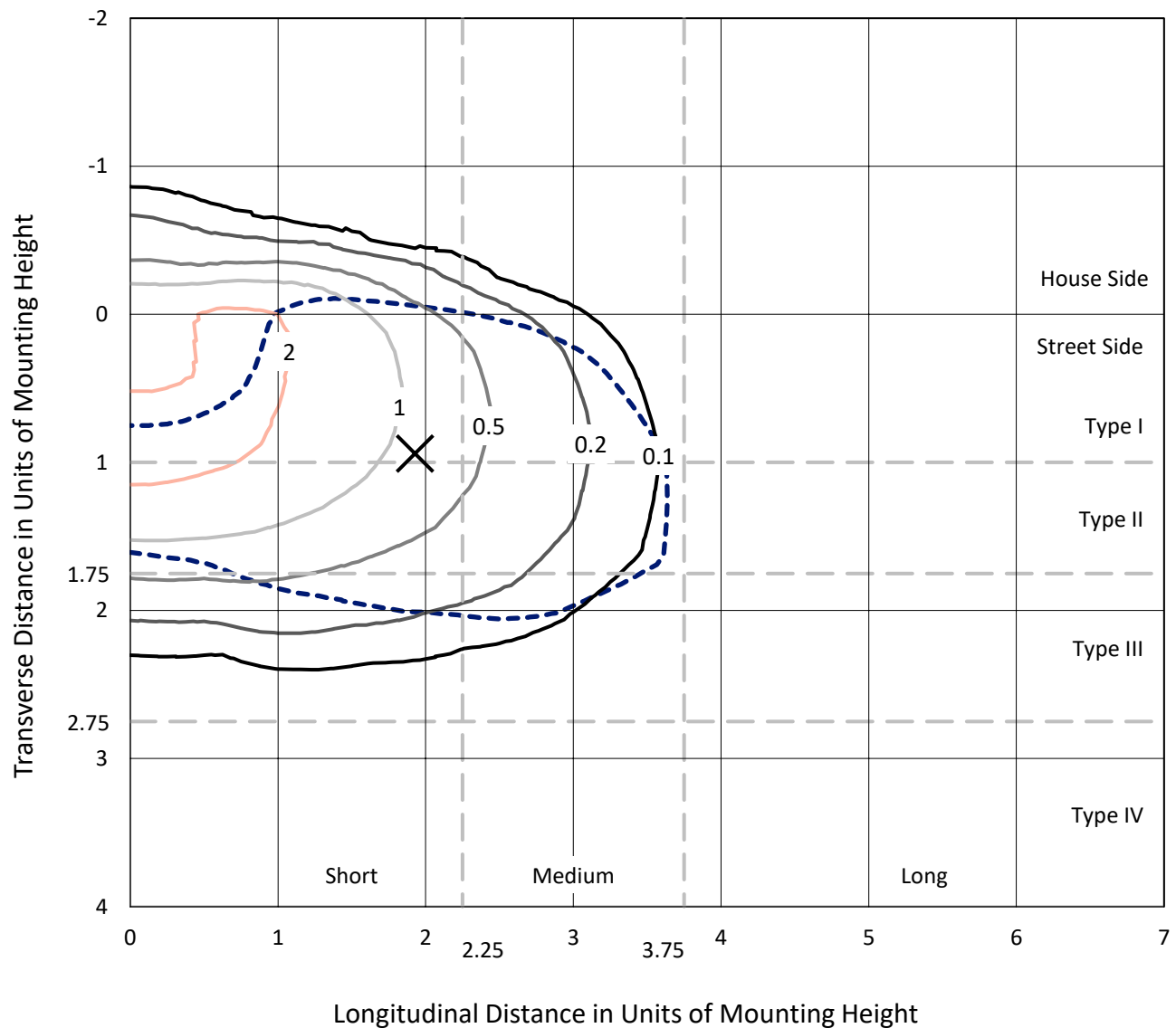


REPORT NUMBER: P961969

CATALOG NUMBER: NAV-SB2B-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

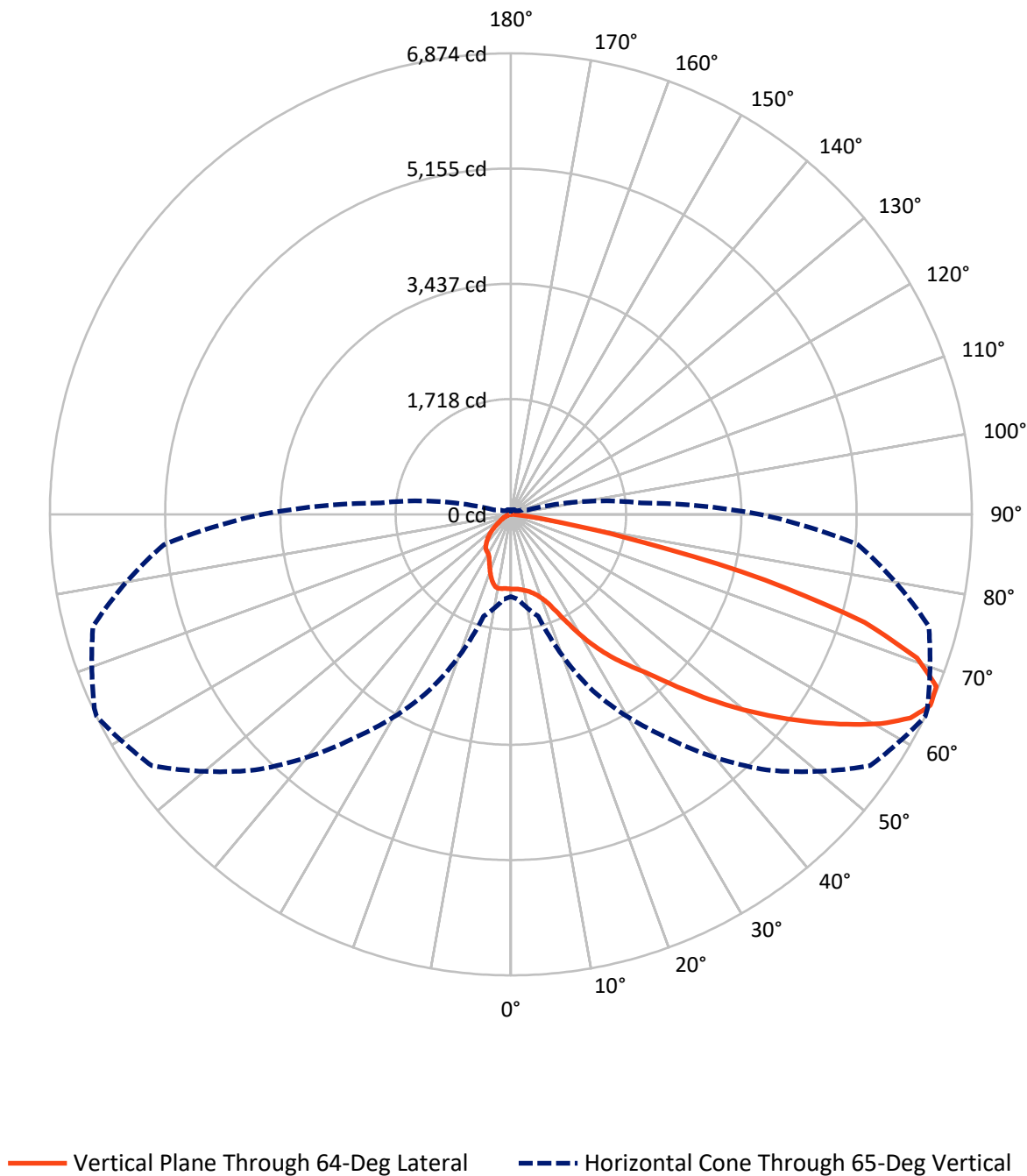


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
Type III - Short - N/A

REPORT NUMBER: P961969

CATALOG NUMBER: NAV-SB2B-740-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P961969

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1280.8	0.0	1280.8
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	8296.8	0.0	8296.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	9577.6	0.0	9577.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	1.1
10°-20°	278.8	2.9
20°-30°	528.2	5.5
30°-40°	1068.9	11.2
40°-50°	1820.8	19.0
50°-60°	2476.2	25.9
60°-70°	2325.3	24.3
70°-80°	931.6	9.7
80°-90°	45.1	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°	9577.6	100.0
0°-180°	9577.6	100.0

Coefficient of Utilization



REPORT NUMBER: P961969

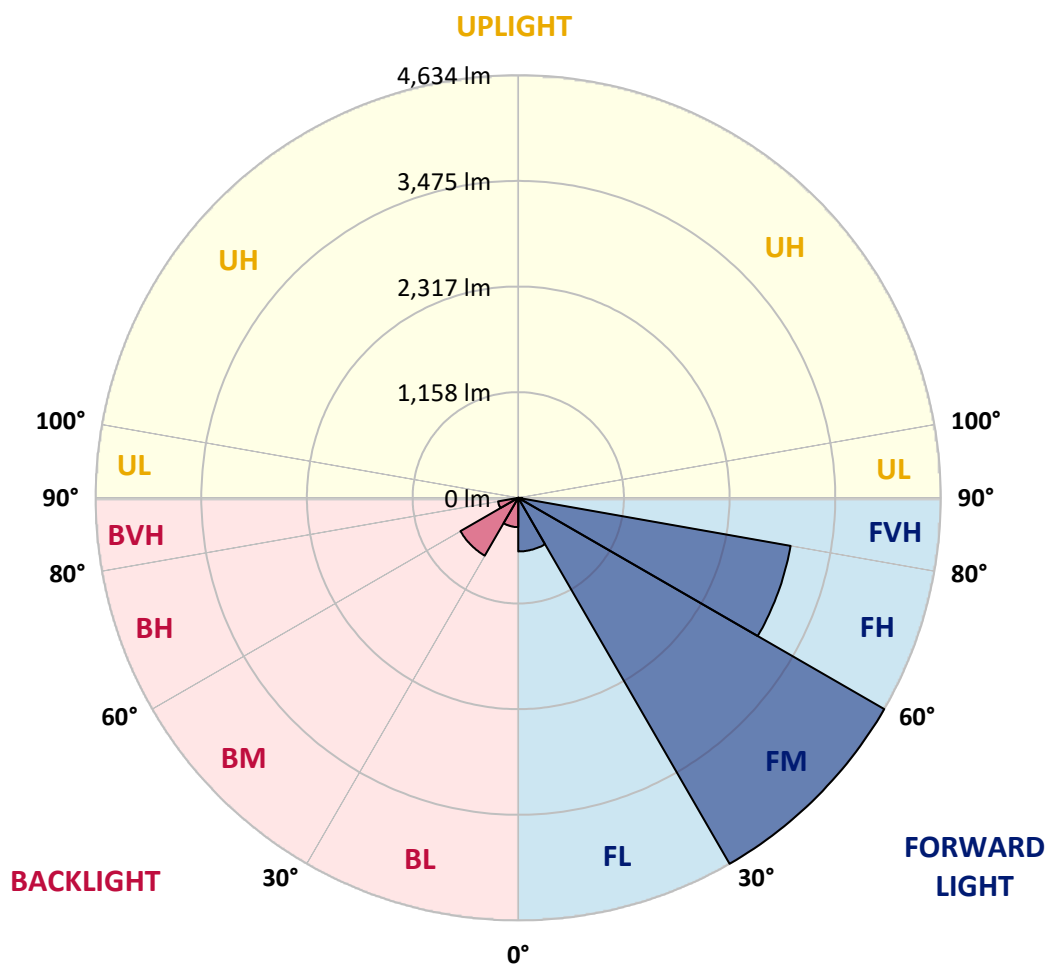
CATALOG NUMBER: NAV-SB2B-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	588.2	6.1			
FM	(30°-60°)	4633.6	48.4			
FH	(60°-80°)	3032.1	31.7			G2/5000
FVH	(80°-90°)	42.9	0.4			G1/100
BL	(0°-30°)	321.6	3.4	B1/500		
BM	(30°-60°)	732.2	7.6	B1/1000		
BH	(60°-80°)	224.8	2.3	B1/500		G1/500
BVH	(80°-90°)	2.2	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 III Short



REPORT NUMBER: P961969

CATALOG NUMBER: NAV-SB2B-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0
2.5°	1110.1	1117.9	1115.9	1114.0	1113.4	1114.6	1115.3	1114.6	1114.6	1114.6	1115.3
5°	1089.0	1095.3	1095.3	1099.8	1106.3	1114.0	1119.7	1121.0	1122.3	1124.2	1123.6
7.5°	1048.5	1053.6	1057.5	1072.3	1088.2	1108.8	1126.2	1135.2	1136.4	1143.5	1146.1
10°	1020.9	1027.3	1033.7	1049.1	1072.3	1103.1	1132.6	1154.5	1157.6	1174.3	1182.0
12.5°	1019.6	1026.0	1034.3	1051.0	1078.0	1110.8	1146.8	1178.1	1184.0	1208.4	1224.4
15°	1033.1	1040.8	1048.5	1069.1	1097.9	1137.8	1176.3	1215.4	1221.2	1255.8	1273.3
17.5°	1060.7	1070.9	1076.8	1097.3	1128.1	1172.4	1223.1	1268.0	1273.3	1313.6	1335.5
20°	1115.3	1127.5	1129.3	1146.1	1176.3	1223.7	1284.1	1340.0	1346.4	1392.7	1417.1
22.5°	1228.3	1245.6	1230.2	1238.5	1265.5	1313.0	1378.5	1449.1	1458.2	1510.7	1532.6
25°	1427.3	1451.7	1411.9	1397.8	1409.3	1458.8	1541.0	1630.2	1640.5	1682.8	1693.7
27.5°	1818.4	1786.9	1726.5	1667.5	1632.7	1661.0	1753.5	1863.9	1876.8	1917.9	1905.0
30°	2247.8	2220.3	2138.7	2007.8	1925.6	1921.1	2006.4	2129.7	2144.5	2183.7	2144.5
32.5°	2678.0	2651.7	2563.1	2402.0	2259.4	2188.8	2247.8	2384.7	2392.4	2417.4	2359.5
35°	3101.1	3074.2	2985.6	2820.6	2645.3	2484.8	2473.2	2627.3	2629.8	2656.2	2570.2
37.5°	3526.8	3504.4	3410.0	3248.2	3075.5	2853.9	2746.7	2857.2	2860.4	2886.1	2796.8
40°	3830.5	3840.2	3775.3	3650.1	3501.8	3259.7	3053.7	3101.8	3082.5	3125.5	3072.2
42.5°	4091.2	4110.5	4054.0	3991.0	3905.0	3691.8	3433.7	3425.3	3394.6	3417.7	3362.5
45°	4316.6	4332.6	4281.9	4267.2	4265.2	4115.6	3849.2	3799.1	3756.0	3751.6	3685.4
47.5°	4399.4	4430.3	4452.1	4501.5	4597.8	4534.9	4278.7	4201.0	4152.9	4117.5	4012.9
50°	4430.9	4463.6	4538.1	4681.9	4909.9	4936.8	4706.3	4619.0	4559.9	4495.8	4341.6
52.5°	4388.4	4446.9	4547.1	4789.1	5119.8	5259.1	5116.6	5040.1	4972.8	4868.1	4639.6
55°	4138.7	4197.2	4402.0	4787.9	5224.4	5485.1	5504.4	5470.3	5394.6	5229.5	4880.3
57.5°	3612.2	3698.9	4023.1	4624.8	5222.5	5679.6	5884.5	5908.9	5824.2	5587.9	5069.8
60°	2882.8	3000.4	3395.8	4263.3	5061.3	5785.0	6217.8	6339.7	6249.8	5941.0	5223.2
62.5°	2011.6	2147.7	2522.0	3697.0	4692.9	5709.1	6461.1	6686.4	6618.3	6256.9	5282.2
65°	1227.0	1270.6	1572.5	2909.2	4066.2	5392.0	6536.2	6873.9	6851.4	6450.1	5194.9
67.5°	817.3	853.9	940.6	1994.9	3156.4	4758.4	6356.4	6841.2	6847.6	6418.7	4875.2
70°	492.4	523.9	580.5	1160.2	2045.6	3766.4	5799.8	6423.8	6461.1	5998.1	4269.0
72.5°	202.8	224.1	275.4	525.8	1059.4	2390.4	4618.3	5515.3	5601.9	5043.4	3276.4
75°	114.9	125.9	161.8	263.9	459.7	1114.0	2797.4	3915.3	4043.0	3476.1	1971.1
77.5°	76.4	81.6	104.7	170.8	258.7	380.1	1195.6	2039.9	2283.8	1898.6	853.3
80°	51.4	55.9	72.0	114.3	168.2	163.1	380.8	755.7	929.7	652.3	208.1
82.5°	34.6	35.4	51.4	75.1	106.6	78.9	112.3	235.0	295.3	188.8	78.9
85°	19.9	19.3	37.9	43.7	47.6	32.7	34.0	70.6	92.5	79.6	44.9
87.5°	2.6	3.9	14.8	11.6	6.5	7.1	7.1	12.2	17.9	19.3	9.6
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: P961969

CATALOG NUMBER: NAV-SB2B-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0	1114.0
2.5°	1115.3	1114.6	1112.7	1110.8	1106.3	1103.7	1104.9	1103.7	1103.1	1103.7	1106.3
5°	1123.6	1121.7	1116.5	1110.1	1101.2	1090.2	1083.1	1072.9	1063.2	1057.5	1058.7
7.5°	1146.1	1144.1	1137.1	1119.1	1090.2	1044.7	1002.9	966.3	938.7	922.6	923.3
10°	1182.0	1178.9	1167.9	1128.1	1052.4	952.8	870.0	801.2	756.3	735.1	733.2
12.5°	1224.4	1220.6	1201.3	1119.7	980.4	825.0	710.7	634.4	592.7	574.0	572.1
15°	1274.5	1269.4	1231.4	1079.9	875.8	683.8	579.1	522.0	495.1	478.4	479.0
17.5°	1336.8	1327.8	1254.0	1020.2	762.1	575.9	498.3	455.2	431.4	415.4	414.1
20°	1417.7	1402.9	1271.9	948.9	657.4	507.9	443.6	407.7	389.7	375.6	373.0
22.5°	1530.6	1509.5	1293.8	872.0	583.6	461.0	403.2	376.9	362.1	346.0	343.5
25°	1670.6	1645.6	1320.7	800.6	532.9	420.6	373.7	351.9	334.6	315.9	314.0
27.5°	1866.4	1821.5	1352.8	742.2	489.2	385.9	346.8	322.4	302.4	287.0	283.8
30°	2084.7	2010.9	1381.1	706.9	449.5	353.7	311.4	287.0	268.3	257.5	255.5
32.5°	2291.5	2191.3	1399.7	691.5	413.5	317.1	272.9	246.5	232.5	229.2	231.1
35°	2486.6	2354.4	1397.8	676.7	381.4	280.5	235.0	208.1	197.1	199.1	199.1
37.5°	2711.4	2528.5	1384.3	653.6	355.1	247.2	202.2	178.5	168.8	169.5	172.1
40°	2972.7	2729.4	1376.0	610.0	326.2	216.4	175.3	156.0	148.9	146.4	145.8
42.5°	3251.4	2923.9	1377.2	560.5	290.2	188.8	156.6	140.6	134.2	132.2	131.6
45°	3531.3	3109.5	1379.1	509.1	252.4	167.6	143.2	129.7	125.9	123.3	123.3
47.5°	3794.6	3267.5	1343.2	454.0	215.0	151.5	132.2	123.3	120.0	116.8	116.8
50°	4039.8	3372.8	1256.5	389.7	185.5	138.7	123.9	117.5	114.3	111.1	111.1
52.5°	4230.6	3389.5	1113.4	323.6	165.0	129.0	118.8	113.0	109.2	106.0	105.3
55°	4315.2	3284.8	909.8	262.0	148.9	120.7	113.7	107.8	103.4	100.1	99.5
57.5°	4293.4	3064.5	709.5	210.6	133.6	112.3	107.2	103.4	98.2	93.1	92.5
60°	4186.2	2769.9	534.8	175.3	119.4	103.4	100.1	97.0	89.9	82.2	80.9
62.5°	4000.7	2399.4	381.4	145.1	104.0	93.1	91.8	89.3	78.9	64.9	63.6
65°	3716.9	1949.3	256.9	120.7	89.3	81.6	82.2	77.7	64.2	48.2	46.8
67.5°	3302.1	1425.4	164.4	98.9	74.5	68.1	68.7	66.1	54.5	41.1	39.2
70°	2773.6	943.8	107.2	75.1	59.8	52.7	56.5	57.1	46.2	33.4	32.1
72.5°	2033.4	557.3	75.1	55.9	43.7	36.6	46.2	47.6	37.2	25.0	23.8
75°	1159.0	264.6	56.5	40.5	27.0	25.7	36.0	36.0	25.7	16.7	15.4
77.5°	486.7	110.4	39.8	26.3	15.4	14.8	24.4	22.4	12.8	7.7	7.7
80°	140.6	49.4	21.2	12.8	6.5	5.7	9.6	7.1	3.2	1.3	1.3
82.5°	55.2	21.8	8.3	5.1	2.6	2.6	1.3	0.0	0.0	0.0	0.0
85°	32.7	9.0	3.9	1.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.3	1.9	1.3	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)