

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: P962465

Luminaire Tested: **NAV-SB2C-735-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962465
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-SB2C-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 615mA 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: 12039.7 lumens
Efficiency: N/A
Efficacy: 119.3 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): 100.9
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



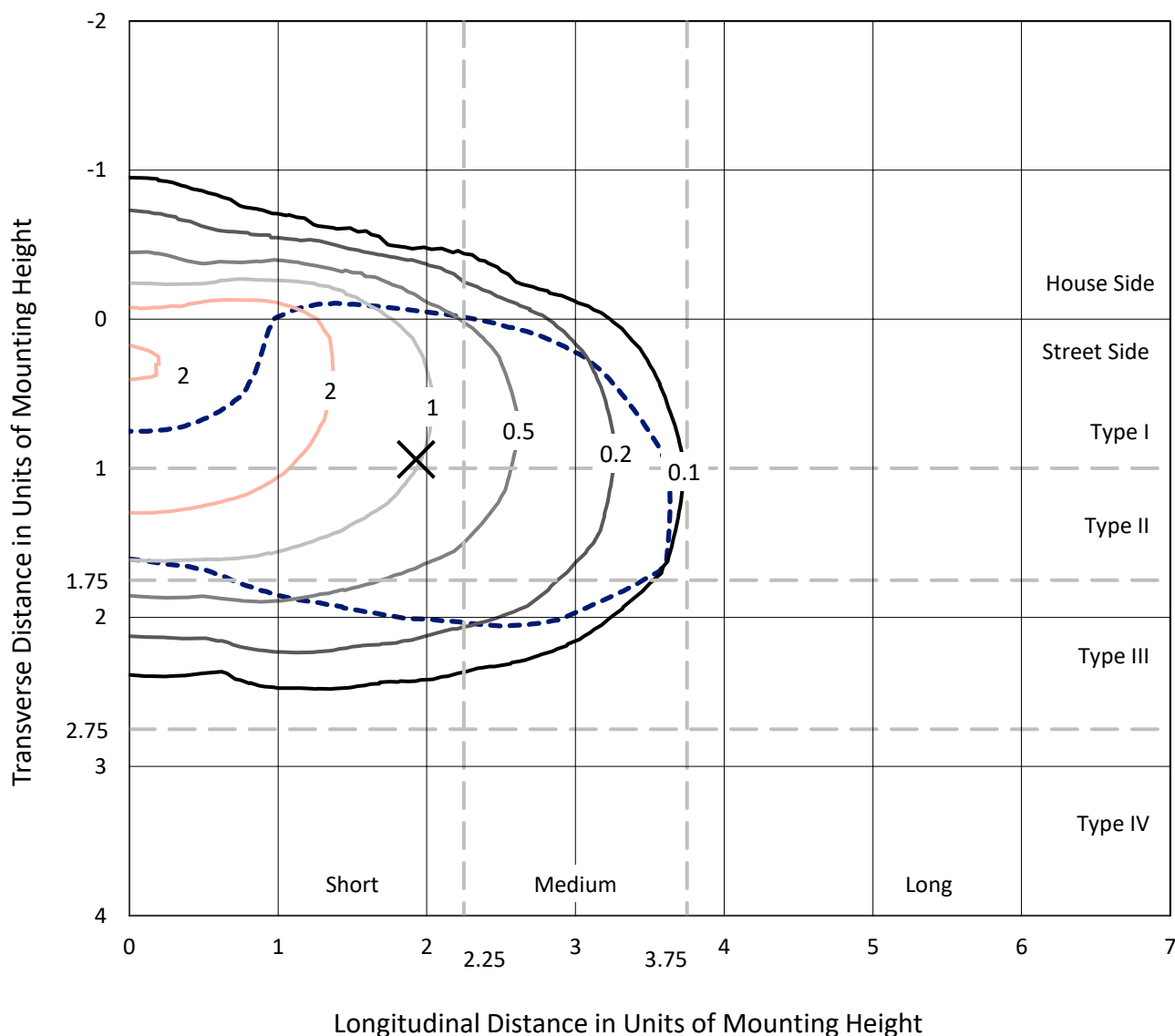
REPORT NUMBER: P962465

CATALOG NUMBER: NAV-SB2C-735-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



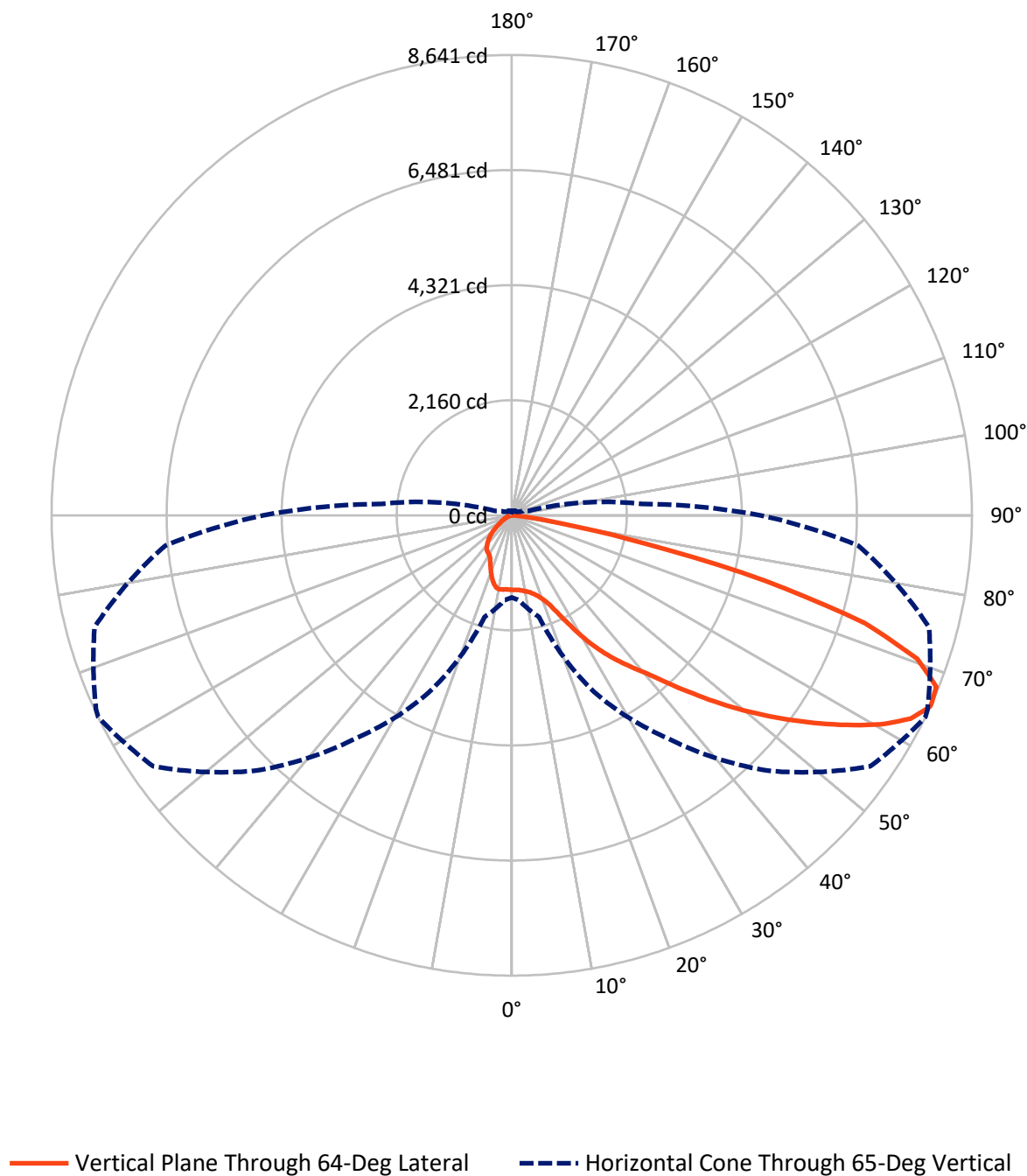
Based on 25 foot mounting height. Maximum calculated value = 3.5 fc

Type III - Short - N/A

REPORT NUMBER: P962465

CATALOG NUMBER: NAV-SB2C-735-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P962465

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1610.1	0.0	1610.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	10429.6	0.0	10429.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	12039.7	0.0	12039.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.2	1.1
10°-20°	350.4	2.9
20°-30°	664.0	5.5
30°-40°	1343.6	11.2
40°-50°	2288.9	19.0
50°-60°	3112.7	25.9
60°-70°	2923.0	24.3
70°-80°	1171.1	9.7
80°-90°	56.7	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°	12039.7	100.0
0°-180°	12039.7	100.0

Coefficient of Utilization



REPORT NUMBER: P962465

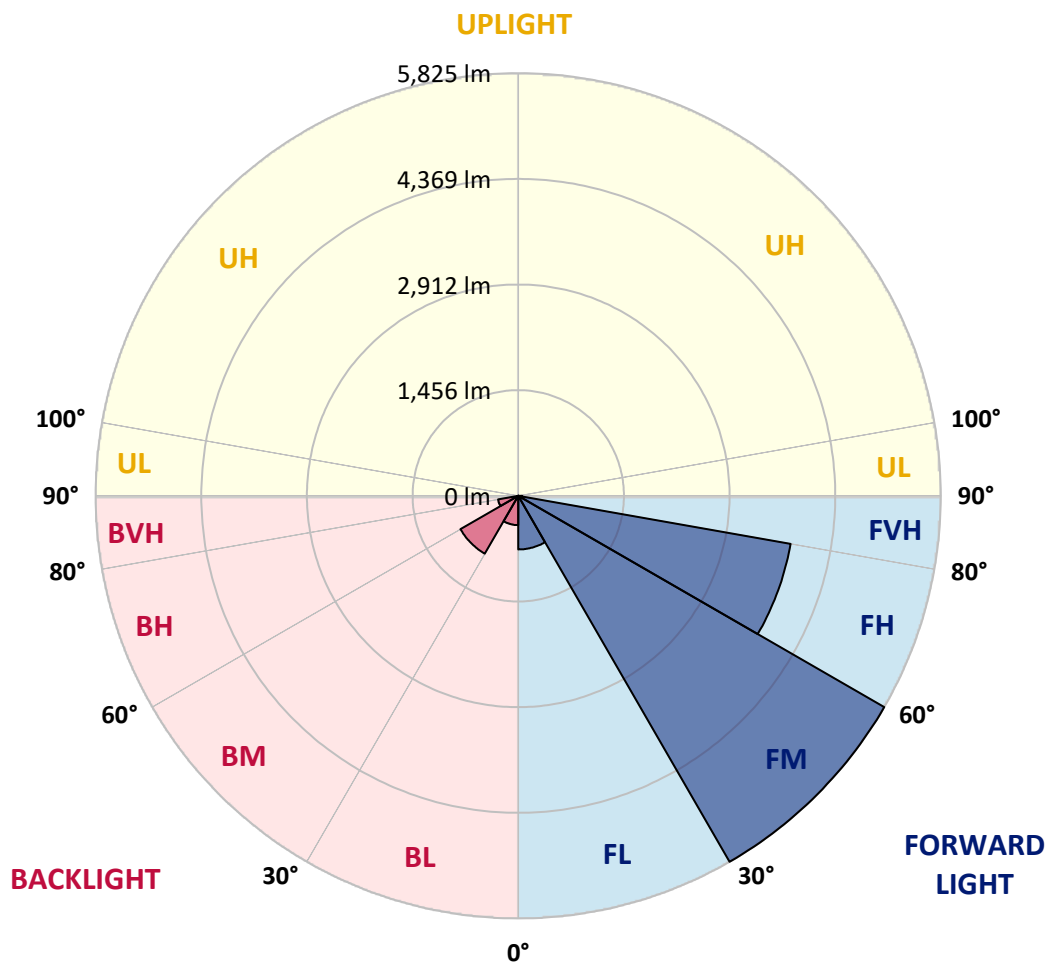
CATALOG NUMBER: NAV-SB2C-735-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	739.4	6.1			
FM	(30°-60°)	5824.8	48.4			
FH	(60°-80°)	3811.5	31.7			G2/5000
FVH	(80°-90°)	54.0	0.4			G1/100
BL	(0°-30°)	404.2	3.4	B1/500		
BM	(30°-60°)	920.5	7.6	B1/1000		
BH	(60°-80°)	282.6	2.3	B1/500		G1/500
BVH	(80°-90°)	2.8	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: P962465

CATALOG NUMBER: NAV-SB2C-735-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4
2.5°	1395.5	1405.2	1402.7	1400.4	1399.5	1401.2	1402.0	1401.2	1401.2	1401.2	1402.0
5°	1368.9	1376.9	1376.9	1382.6	1390.6	1400.4	1407.6	1409.2	1410.8	1413.3	1412.4
7.5°	1318.0	1324.5	1329.3	1347.9	1368.1	1393.9	1415.6	1427.0	1428.5	1437.5	1440.7
10°	1283.3	1291.4	1299.5	1318.9	1347.9	1386.6	1423.7	1451.2	1455.2	1476.2	1485.8
12.5°	1281.7	1289.8	1300.2	1321.2	1355.2	1396.3	1441.5	1481.0	1488.3	1518.9	1539.1
15°	1298.7	1308.3	1318.0	1343.9	1380.2	1430.2	1478.7	1527.9	1535.1	1578.7	1600.5
17.5°	1333.3	1346.2	1353.5	1379.3	1418.1	1473.7	1537.5	1594.1	1600.5	1651.4	1678.7
20°	1402.0	1417.3	1419.7	1440.7	1478.7	1538.3	1614.2	1684.5	1692.5	1750.6	1781.2
22.5°	1544.0	1565.8	1546.4	1556.9	1590.8	1650.6	1732.9	1821.6	1832.9	1899.1	1926.6
25°	1794.2	1824.9	1774.8	1757.1	1771.6	1833.7	1937.0	2049.3	2062.2	2115.4	2129.1
27.5°	2285.8	2246.2	2170.3	2096.0	2052.5	2088.0	2204.3	2343.0	2359.1	2410.8	2394.7
30°	2825.7	2791.0	2688.5	2523.9	2420.5	2414.9	2522.2	2677.2	2695.7	2745.0	2695.7
32.5°	3366.4	3333.4	3222.0	3019.4	2840.2	2751.4	2825.7	2997.6	3007.2	3038.8	2966.1
35°	3898.4	3864.5	3753.0	3545.7	3325.3	3123.5	3109.0	3302.7	3305.9	3339.0	3230.9
37.5°	4433.4	4405.2	4286.5	4083.2	3866.1	3587.6	3452.8	3591.6	3595.7	3628.0	3515.7
40°	4815.2	4827.3	4745.9	4588.4	4402.0	4097.7	3838.6	3899.1	3874.9	3929.0	3862.0
42.5°	5142.9	5167.1	5096.1	5017.0	4908.8	4640.9	4316.4	4305.9	4267.2	4296.3	4226.8
45°	5426.2	5446.3	5382.6	5364.0	5361.7	5173.6	4838.6	4775.7	4721.6	4715.9	4632.8
47.5°	5530.3	5569.0	5596.5	5658.6	5779.7	5700.6	5378.6	5280.9	5220.4	5176.0	5044.4
50°	5569.8	5611.1	5704.6	5885.4	6171.9	6205.9	5916.1	5806.3	5732.1	5651.3	5457.7
52.5°	5516.5	5590.0	5715.9	6020.2	6435.9	6611.0	6431.9	6335.8	6251.1	6119.6	5832.1
55°	5202.6	5276.1	5533.6	6018.6	6567.5	6895.2	6919.4	6876.6	6781.3	6573.9	6134.8
57.5°	4540.9	4649.8	5057.3	5813.6	6565.0	7139.7	7397.1	7427.9	7321.3	7024.3	6372.9
60°	3623.9	3771.6	4268.8	5359.2	6362.5	7272.1	7816.0	7969.4	7856.4	7468.2	6565.8
62.5°	2528.7	2699.7	3170.3	4647.3	5899.2	7176.8	8122.0	8405.2	8319.7	7865.3	6640.1
65°	1542.4	1597.3	1976.6	3657.0	5111.5	6778.1	8216.4	8641.0	8612.7	8108.3	6530.4
67.5°	1027.5	1073.5	1182.4	2507.7	3967.8	5981.5	7990.4	8599.8	8607.8	8068.7	6128.4
70°	619.1	658.6	729.6	1458.5	2571.4	4734.5	7290.6	8075.2	8122.0	7540.0	5366.5
72.5°	255.0	281.7	346.2	661.0	1331.8	3004.9	5805.5	6933.1	7042.1	6339.8	4118.7
75°	144.4	158.2	203.4	331.7	577.9	1400.4	3516.6	4921.7	5082.4	4369.7	2477.8
77.5°	96.0	102.5	131.6	214.7	325.2	477.9	1502.9	2564.1	2870.9	2386.6	1072.7
80°	64.6	70.2	90.4	143.7	211.5	205.0	478.6	950.0	1168.7	820.0	261.5
82.5°	43.6	44.4	64.6	94.4	134.0	99.3	141.2	295.4	371.3	237.3	99.3
85°	25.0	24.2	47.7	54.8	59.8	41.2	42.7	88.8	116.2	100.0	56.5
87.5°	3.2	4.8	18.6	14.6	8.1	8.9	8.9	15.4	22.5	24.2	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

REPORT NUMBER: P962465

CATALOG NUMBER: NAV-SB2C-735-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4	1400.4
2.5°	1402.0	1401.2	1398.7	1396.3	1390.6	1387.4	1389.1	1387.4	1386.6	1387.4	1390.6
5°	1412.4	1410.0	1403.5	1395.5	1384.2	1370.4	1361.6	1348.7	1336.6	1329.3	1331.0
7.5°	1440.7	1438.3	1429.4	1406.8	1370.4	1313.1	1260.8	1214.7	1180.0	1159.8	1160.6
10°	1485.8	1481.8	1468.1	1418.1	1322.9	1197.7	1093.7	1007.3	950.8	924.1	921.7
12.5°	1539.1	1534.3	1510.1	1407.6	1232.5	1037.1	893.5	797.4	745.0	721.6	719.1
15°	1602.1	1595.6	1548.1	1357.5	1100.8	859.6	728.1	656.2	622.3	601.3	602.1
17.5°	1680.4	1669.1	1576.2	1282.5	958.1	724.0	626.3	572.3	542.3	522.2	520.6
20°	1782.1	1763.5	1598.9	1192.9	826.5	638.5	557.7	512.5	489.9	472.1	468.9
22.5°	1924.1	1897.5	1626.4	1096.0	733.7	579.5	506.9	473.8	455.2	435.0	431.8
25°	2100.1	2068.7	1660.2	1006.4	669.9	528.7	469.8	442.3	420.5	397.1	394.7
27.5°	2346.2	2289.7	1700.6	933.1	615.0	485.0	435.8	405.2	380.2	360.8	356.7
30°	2620.7	2527.9	1736.1	888.7	565.0	444.7	391.4	360.8	337.3	323.7	321.2
32.5°	2880.6	2754.7	1759.5	869.3	519.8	398.7	343.1	310.0	292.1	288.1	290.6
35°	3125.9	2959.7	1757.1	850.6	479.4	352.7	295.4	261.5	247.7	250.2	250.2
37.5°	3408.4	3178.4	1740.1	821.6	446.3	310.8	254.2	224.4	212.3	213.1	216.3
40°	3736.9	3431.0	1729.7	766.8	410.0	272.0	220.4	196.1	187.3	184.0	183.2
42.5°	4087.2	3675.5	1731.2	704.6	364.8	237.3	196.9	176.7	168.7	166.3	165.4
45°	4439.1	3908.8	1733.7	640.0	317.2	210.6	180.0	163.1	158.2	155.0	155.0
47.5°	4770.0	4107.4	1688.5	570.6	270.4	190.4	166.3	155.0	150.9	146.9	146.9
50°	5078.4	4239.7	1579.5	489.9	233.3	174.4	155.8	147.7	143.7	139.6	139.6
52.5°	5318.0	4260.7	1399.5	406.8	207.5	162.3	149.3	142.1	137.2	133.1	132.3
55°	5424.6	4129.2	1143.7	329.3	187.3	151.7	142.9	135.6	130.0	125.9	125.2
57.5°	5397.1	3852.4	891.9	264.8	167.9	141.2	134.8	130.0	123.5	117.1	116.2
60°	5262.3	3481.8	672.3	220.4	150.2	130.0	125.9	121.9	113.0	103.3	101.7
62.5°	5029.1	3016.2	479.4	182.4	130.8	117.1	115.4	112.2	99.3	81.5	79.9
65°	4672.4	2450.4	322.9	151.7	112.2	102.5	103.3	97.7	80.7	60.6	58.9
67.5°	4150.9	1791.8	206.6	124.3	93.6	85.6	86.4	83.1	68.6	51.7	49.2
70°	3486.7	1186.4	134.8	94.4	75.0	66.2	71.0	71.9	58.1	41.9	40.4
72.5°	2556.1	700.6	94.4	70.2	54.8	46.0	58.1	59.8	46.8	31.5	29.8
75°	1456.8	332.5	71.0	50.8	33.9	32.3	45.2	45.2	32.3	21.0	19.4
77.5°	611.8	138.8	50.0	33.1	19.4	18.6	30.6	28.3	16.1	9.6	9.6
80°	176.7	62.1	26.6	16.1	8.1	7.3	12.1	8.9	4.0	1.6	1.6
82.5°	69.4	27.5	10.5	6.5	3.2	3.2	1.6	0.0	0.0	0.0	0.0
85°	41.2	11.3	4.8	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.5	2.5	1.6	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)