

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: P964201

Luminaire Tested: **NAV-SB3B-830-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964201
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-SB3B-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 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: 12203.6 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 109.2
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



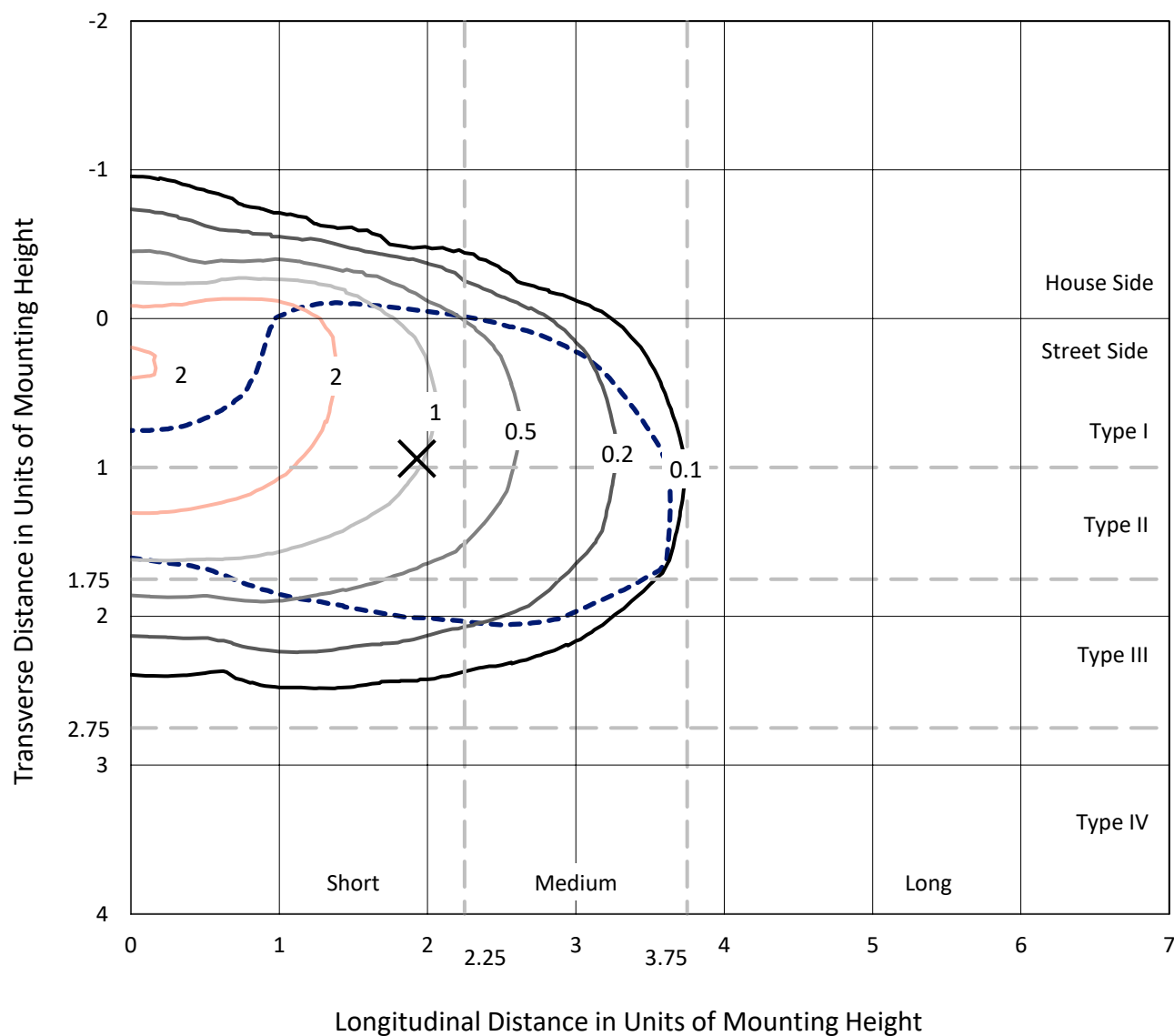
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



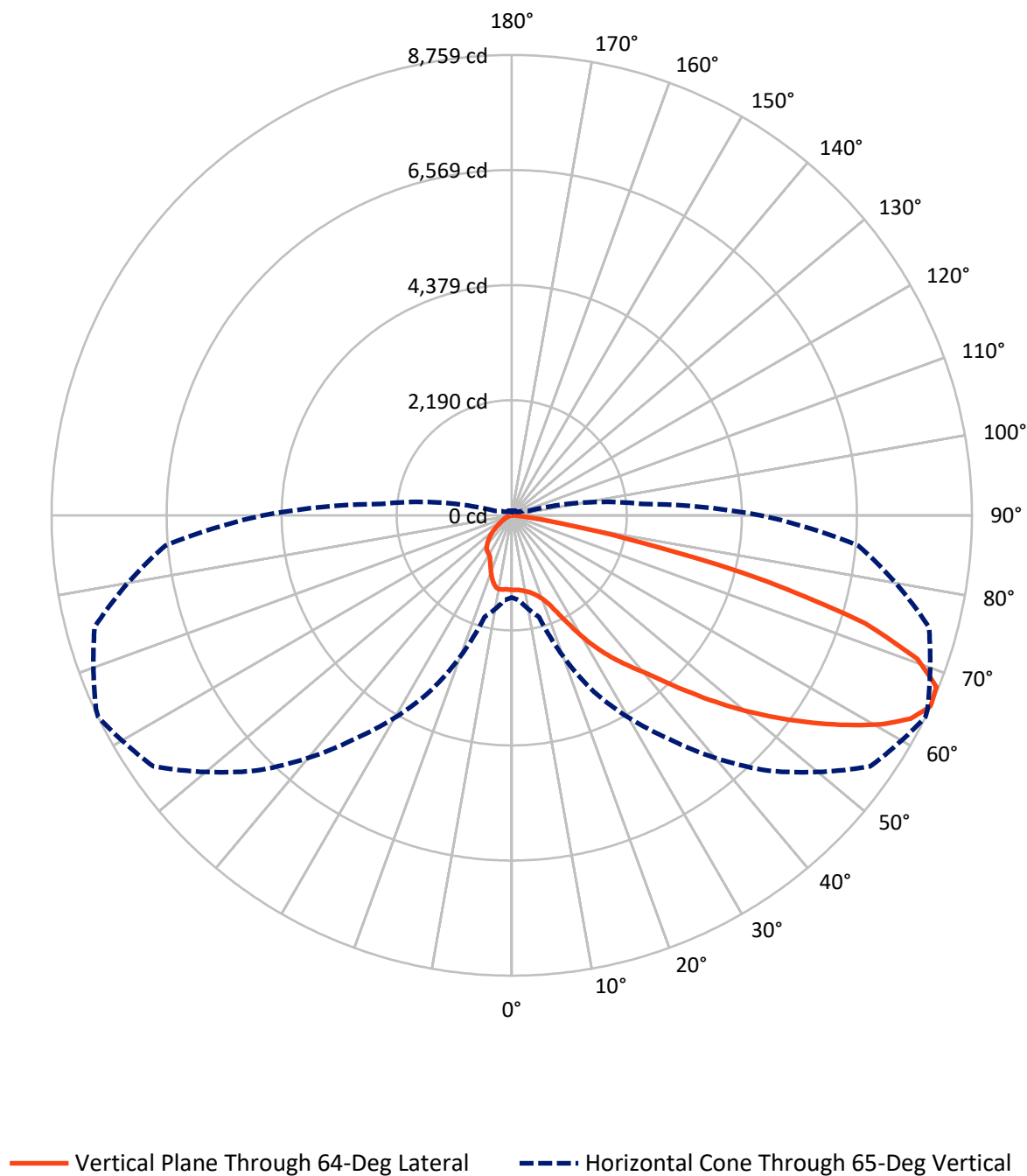
Based on 25 foot mounting height. Maximum calculated value = 3.6 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1632.0	0.0	1632.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	10571.6	0.0	10571.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	12203.6	0.0	12203.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.0	1.1
10°-20°	355.2	2.9
20°-30°	673.0	5.5
30°-40°	1361.9	11.2
40°-50°	2320.1	19.0
50°-60°	3155.1	25.9
60°-70°	2962.8	24.3
70°-80°	1187.0	9.7
80°-90°	57.5	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°	12203.6	100.0
0°-180°	12203.6	100.0

Coefficient of Utilization



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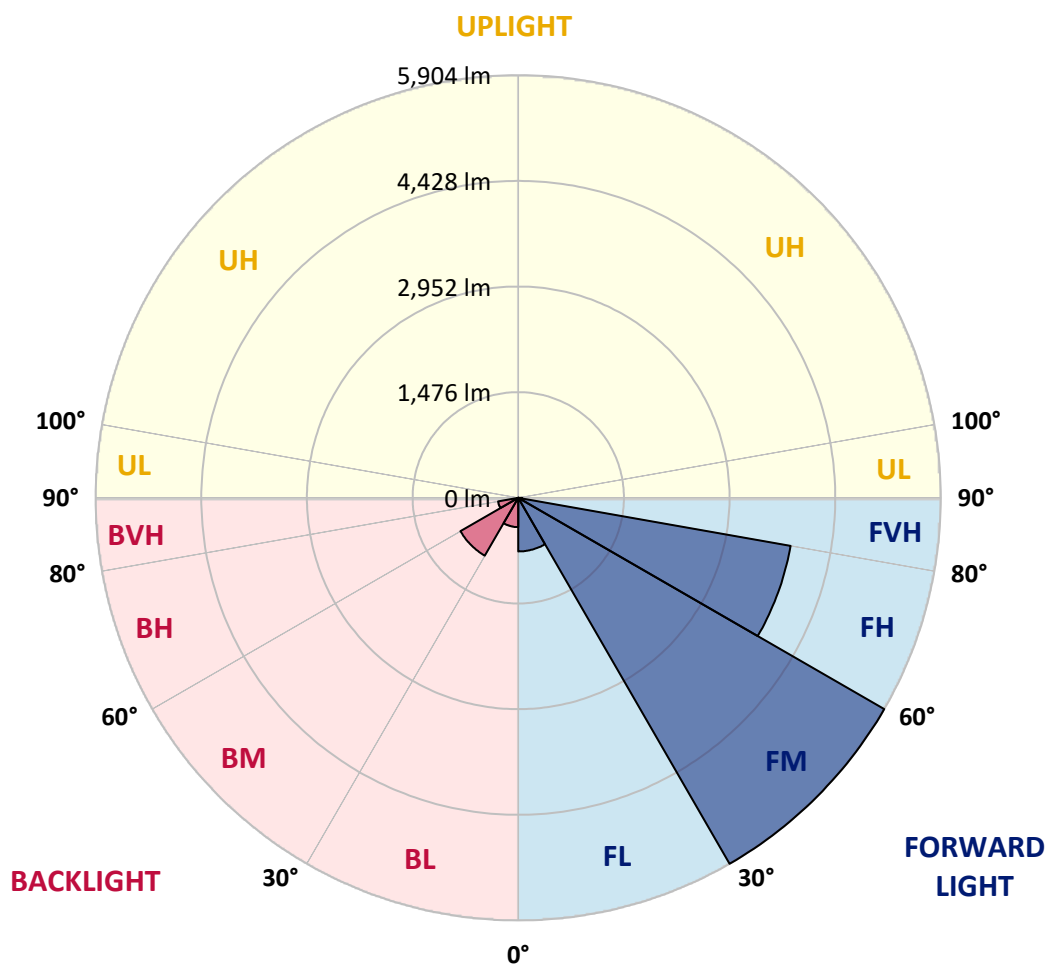
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	749.4	6.1			
FM	(30°-60°)	5904.1	48.4			
FH	(60°-80°)	3863.4	31.7			G2/5000
FVH	(80°-90°)	54.7	0.4			G1/100
BL	(0°-30°)	409.7	3.4	B1/500		
BM	(30°-60°)	933.0	7.6	B1/1000		
BH	(60°-80°)	286.4	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4
2.5°	1414.5	1424.3	1421.9	1419.4	1418.6	1420.2	1421.1	1420.2	1420.2	1420.2	1421.1
5°	1387.5	1395.6	1395.6	1401.4	1409.6	1419.4	1426.8	1428.4	1430.1	1432.5	1431.7
7.5°	1336.0	1342.5	1347.5	1366.2	1386.7	1412.9	1435.0	1446.4	1448.0	1457.0	1460.3
10°	1300.8	1308.9	1317.1	1336.8	1366.2	1405.5	1443.1	1471.0	1475.1	1496.3	1506.1
12.5°	1299.2	1307.3	1317.9	1339.3	1373.6	1415.3	1461.1	1501.2	1508.6	1539.7	1560.2
15°	1316.3	1326.1	1336.0	1362.1	1398.9	1449.7	1498.8	1548.7	1556.1	1600.2	1622.3
17.5°	1351.5	1364.6	1372.0	1398.1	1437.5	1493.8	1558.5	1615.7	1622.3	1673.8	1701.7
20°	1421.1	1436.6	1439.0	1460.3	1498.8	1559.3	1636.2	1707.3	1715.5	1774.5	1805.5
22.5°	1565.1	1587.1	1567.5	1578.1	1612.5	1673.0	1756.4	1846.4	1857.9	1925.0	1952.8
25°	1818.7	1849.7	1799.0	1781.0	1795.7	1858.7	1963.5	2077.2	2090.3	2144.3	2158.1
27.5°	2316.9	2276.8	2199.9	2124.6	2080.4	2116.4	2234.2	2374.9	2391.3	2443.7	2427.3
30°	2864.2	2829.0	2725.1	2558.2	2453.5	2447.8	2556.6	2713.7	2732.4	2782.4	2732.4
32.5°	3412.3	3378.8	3265.9	3060.5	2878.9	2788.9	2864.2	3038.4	3048.2	3080.1	3006.5
35°	3951.5	3917.0	3804.2	3594.0	3370.6	3166.0	3151.4	3347.6	3350.9	3384.4	3274.9
37.5°	4493.8	4465.2	4345.0	4138.7	3918.7	3636.5	3499.9	3640.6	3644.7	3677.4	3563.6
40°	4880.8	4893.0	4810.4	4650.9	4461.9	4153.5	3890.9	3952.3	3927.7	3982.5	3914.7
42.5°	5212.9	5237.5	5165.5	5085.3	4975.8	4704.1	4375.2	4364.6	4325.3	4354.8	4284.4
45°	5500.2	5520.5	5456.0	5437.1	5434.7	5244.0	4904.5	4840.8	4785.9	4780.2	4695.9
47.5°	5605.6	5644.9	5672.8	5735.7	5858.5	5778.2	5451.9	5352.9	5291.5	5246.5	5113.1
50°	5645.7	5687.4	5782.3	5965.6	6256.1	6290.4	5996.7	5885.4	5810.2	5728.4	5532.0
52.5°	5591.8	5666.2	5793.8	6102.2	6523.6	6701.1	6519.5	6422.1	6336.2	6202.9	5911.6
55°	5273.5	5347.9	5608.9	6100.6	6657.0	6989.1	7013.6	6970.2	6873.8	6663.4	6218.4
57.5°	4602.7	4713.1	5126.2	5892.8	6654.5	7236.9	7498.0	7529.0	7421.0	7120.0	6459.8
60°	3673.3	3823.0	4326.9	5432.2	6449.1	7371.1	7922.5	8077.9	7963.4	7569.9	6655.3
62.5°	2563.1	2736.5	3213.5	4710.7	5979.5	7274.6	8232.6	8519.7	8433.0	7972.4	6730.6
65°	1563.4	1619.0	2003.6	3706.8	5181.1	6870.5	8328.3	8758.6	8730.0	8218.7	6619.2
67.5°	1041.4	1088.0	1198.5	2541.9	4021.8	6063.0	8099.2	8716.9	8725.1	8178.6	6211.9
70°	627.5	667.6	739.5	1478.4	2606.5	4799.0	7389.9	8185.1	8232.6	7642.7	5439.6
72.5°	258.5	285.6	351.0	670.0	1349.8	3045.8	5884.6	7027.5	7138.0	6426.2	4174.8
75°	146.5	160.3	206.1	336.2	585.8	1419.4	3564.4	4988.8	5151.6	4429.2	2511.6
77.5°	97.4	103.9	133.4	217.6	329.7	484.3	1523.4	2599.1	2910.0	2419.1	1087.2
80°	65.5	71.1	91.6	145.7	214.3	207.8	485.1	962.9	1184.6	831.2	265.1
82.5°	44.2	45.0	65.5	95.7	135.8	100.7	143.2	299.4	376.3	240.6	100.7
85°	25.3	24.5	48.3	55.7	60.6	41.7	43.4	90.0	117.8	101.5	57.3
87.5°	3.3	4.9	18.9	14.8	8.2	9.0	9.0	15.6	22.9	24.5	12.3
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°	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4
2.5°	1421.1	1420.2	1417.8	1415.3	1409.6	1406.3	1407.9	1406.3	1405.5	1406.3	1409.6
5°	1431.7	1429.3	1422.7	1414.5	1403.0	1389.2	1380.2	1367.0	1354.7	1347.5	1349.1
7.5°	1460.3	1457.9	1448.8	1426.0	1389.2	1331.1	1277.9	1231.2	1196.1	1175.6	1176.4
10°	1506.1	1502.0	1488.1	1437.5	1340.9	1214.1	1108.5	1021.0	963.7	936.7	934.3
12.5°	1560.2	1555.2	1530.6	1426.8	1249.3	1051.2	905.7	808.3	755.1	731.3	729.0
15°	1623.9	1617.3	1569.2	1376.1	1115.9	871.2	737.9	665.1	630.8	609.5	610.3
17.5°	1703.2	1691.9	1597.8	1300.0	971.1	733.8	634.9	580.0	549.8	529.3	527.7
20°	1806.4	1787.6	1620.6	1209.2	837.7	647.1	565.3	519.5	496.6	478.6	475.3
22.5°	1950.4	1923.4	1648.5	1111.0	743.6	587.4	513.7	480.2	461.5	441.0	437.7
25°	2128.7	2096.8	1682.8	1020.2	679.1	535.9	476.1	448.3	426.2	402.5	400.1
27.5°	2378.2	2321.0	1723.7	945.8	623.4	491.7	441.8	410.7	385.3	365.7	361.6
30°	2656.4	2562.3	1759.7	900.8	572.7	450.8	396.8	365.7	341.9	328.1	325.6
32.5°	2919.8	2792.2	1783.5	881.1	526.8	404.2	347.7	314.2	296.1	292.0	294.5
35°	3168.5	3000.0	1781.0	862.3	486.0	357.5	299.4	265.1	251.1	253.6	253.6
37.5°	3454.9	3221.7	1763.8	832.8	452.4	315.0	257.7	227.4	215.1	216.0	219.2
40°	3787.8	3477.7	1753.2	777.2	415.6	275.7	223.3	198.8	189.8	186.5	185.7
42.5°	4142.8	3725.7	1754.8	714.2	369.8	240.6	199.6	179.2	171.0	168.5	167.7
45°	4499.5	3962.0	1757.3	648.7	321.5	213.5	182.4	165.2	160.3	157.0	157.0
47.5°	4835.0	4163.3	1711.4	578.4	274.1	193.1	168.5	157.0	153.0	148.9	148.9
50°	5147.5	4297.5	1601.0	496.6	236.5	176.7	157.8	149.8	145.7	141.6	141.6
52.5°	5390.5	4318.7	1418.6	412.4	210.2	164.4	151.4	144.0	139.1	135.0	134.2
55°	5498.5	4185.4	1159.3	333.7	189.8	153.9	144.8	137.5	131.7	127.6	126.8
57.5°	5470.6	3904.8	904.0	268.3	170.1	143.2	136.6	131.7	125.2	118.6	117.8
60°	5334.0	3529.3	681.5	223.3	152.2	131.7	127.6	123.5	114.5	104.8	103.1
62.5°	5097.6	3057.3	486.0	184.9	132.5	118.6	117.0	113.7	100.7	82.6	81.0
65°	4736.0	2483.8	327.3	153.9	113.7	103.9	104.8	99.0	81.8	61.4	59.8
67.5°	4207.5	1816.2	209.4	126.0	94.9	86.7	87.5	84.3	69.5	52.4	49.9
70°	3534.2	1202.6	136.6	95.7	76.1	67.0	72.0	72.8	58.9	42.5	40.9
72.5°	2590.9	710.1	95.7	71.1	55.7	46.6	58.9	60.6	47.5	31.9	30.2
75°	1476.7	337.0	72.0	51.6	34.3	32.7	45.8	45.8	32.7	21.3	19.7
77.5°	620.1	140.7	50.7	33.5	19.7	18.9	31.1	28.6	16.4	9.8	9.8
80°	179.2	63.0	27.0	16.4	8.2	7.4	12.3	9.0	4.1	1.6	1.6
82.5°	70.3	27.8	10.7	6.6	3.3	3.3	1.6	0.0	0.0	0.0	0.0
85°	41.7	11.5	4.9	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.7	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)