

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: P963709

Luminaire Tested: **NAV-SB3A-835-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-835-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9688.3 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

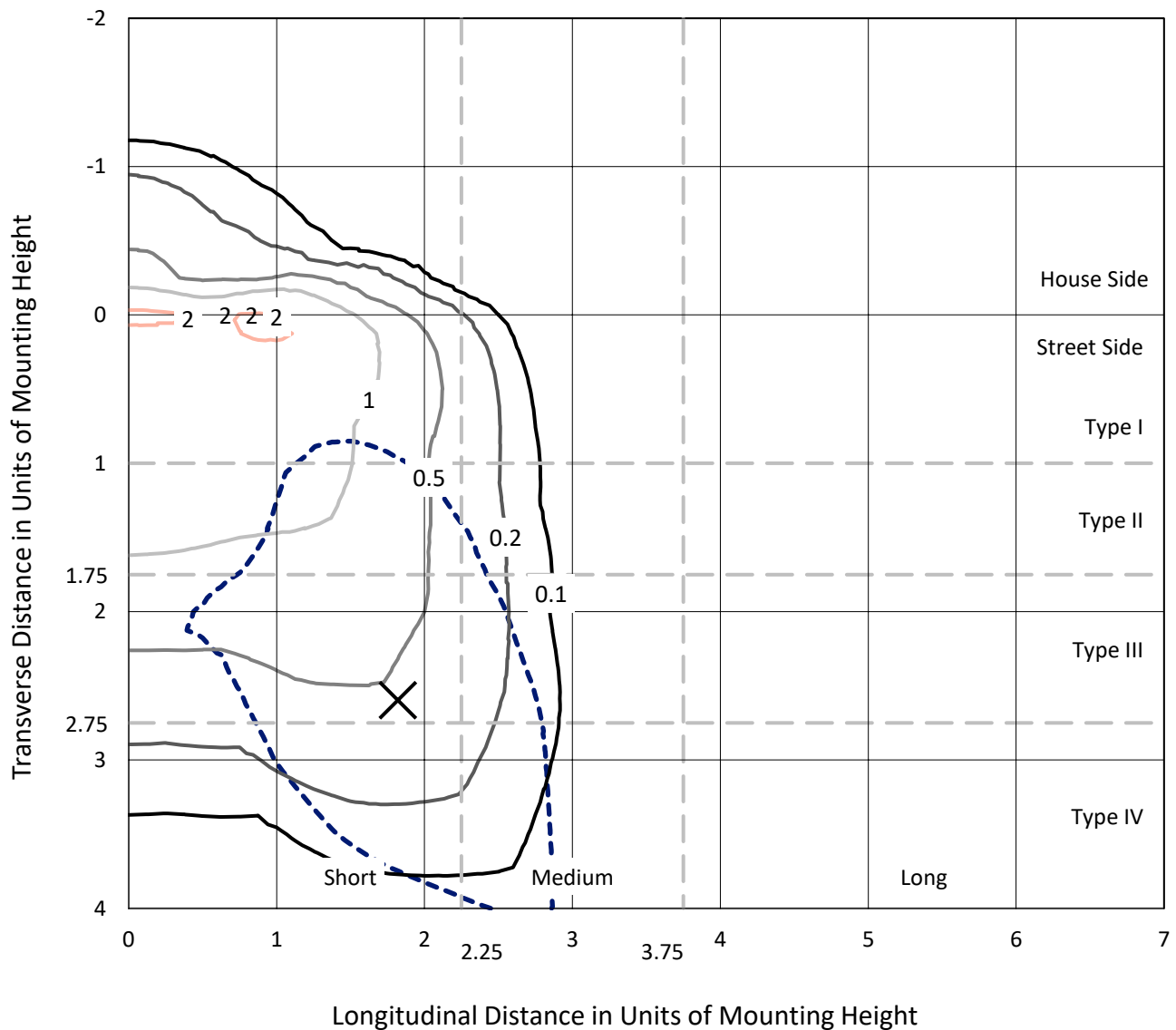
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

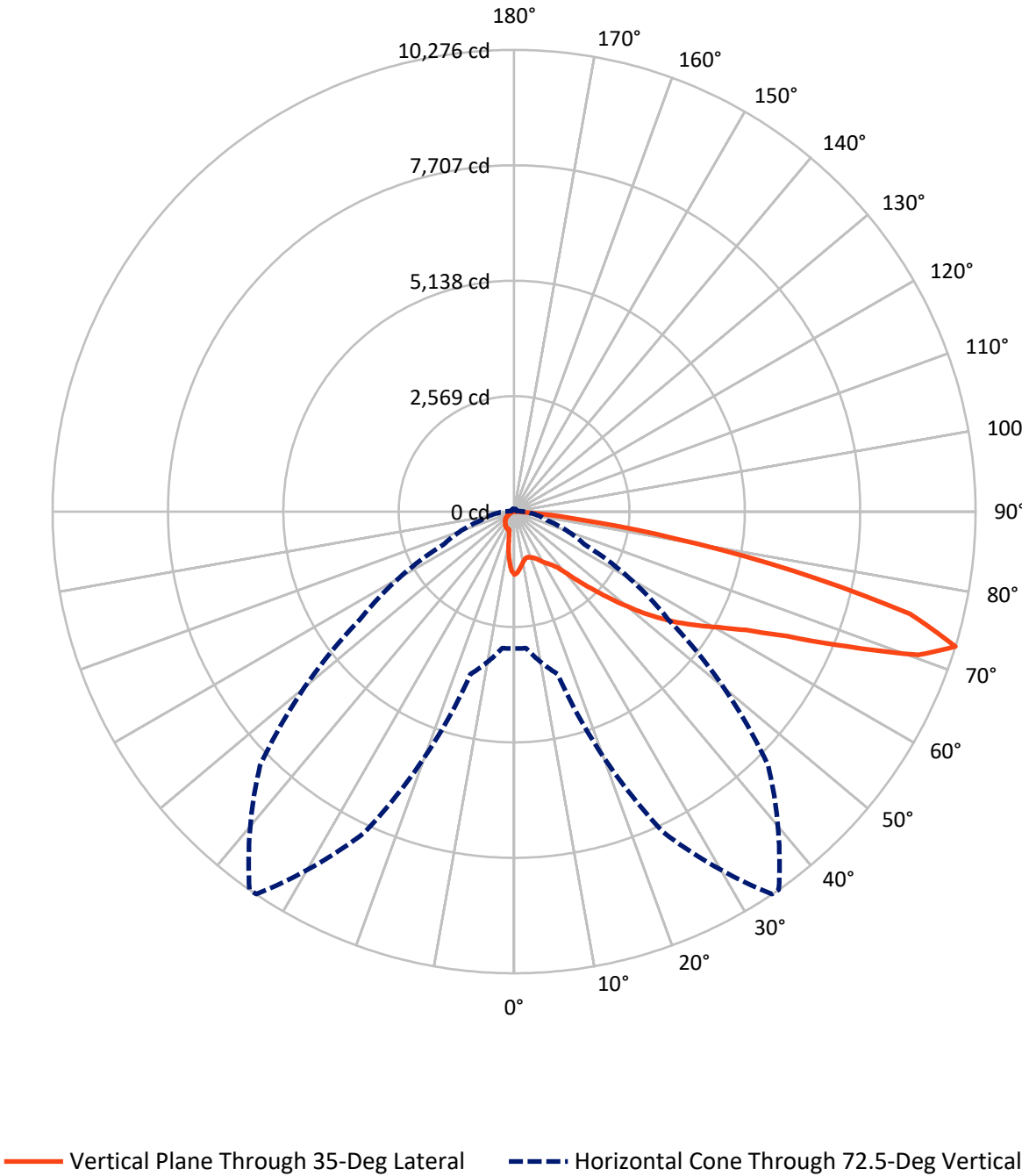
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1090.4	0.0	1090.4
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	8597.9	0.0	8597.9
	% Fixture	88.7	0.0	88.7
Total	Lumens	9688.3	0.0	9688.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	1.2
10°-20°	269.9	2.8
20°-30°	438.5	4.5
30°-40°	731.6	7.6
40°-50°	1384.2	14.3
50°-60°	2199.6	22.7
60°-70°	2721.0	28.1
70°-80°	1691.4	17.5
80°-90°	136.7	1.4
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°	9688.3	100.0
0°-180°	9688.3	100.0

Coefficient of Utilization



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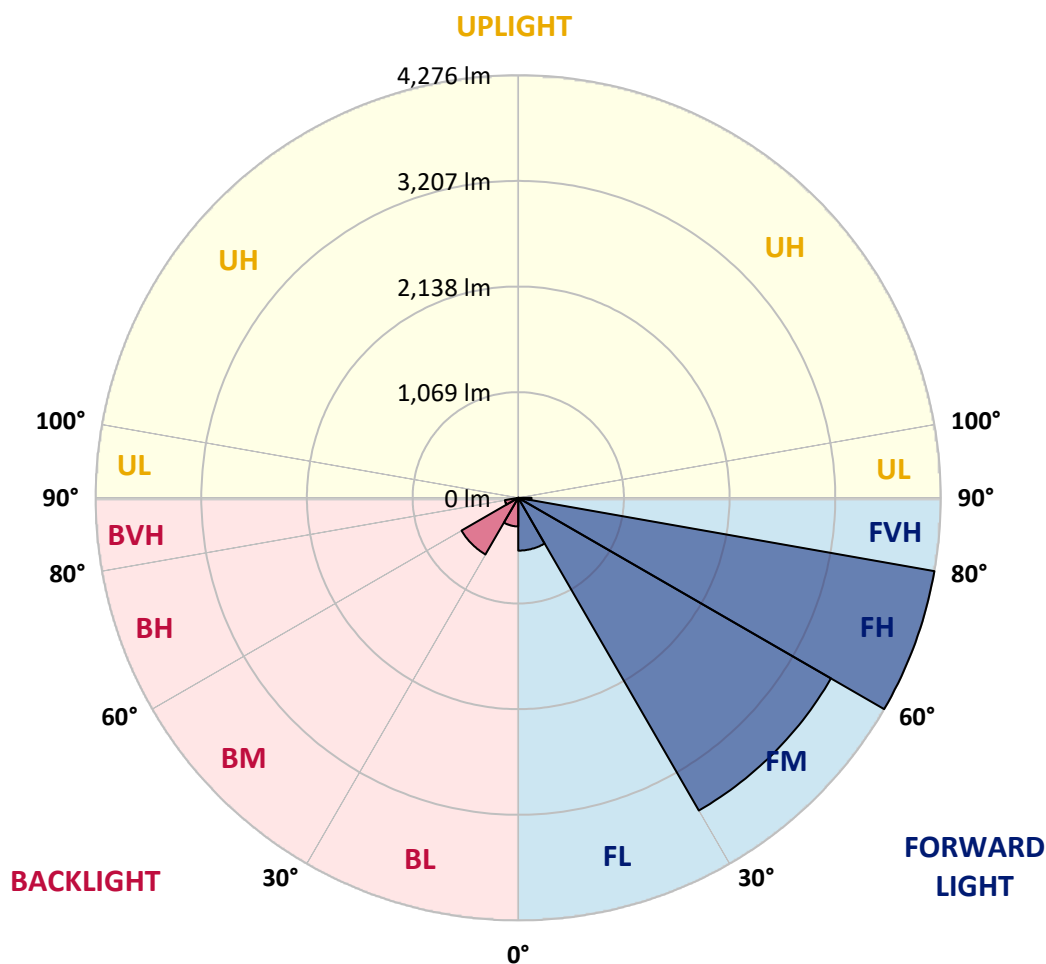
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	534.1	5.5			
FM	(30°-60°)	3653.5	37.7			
FH	(60°-80°)	4275.6	44.1			G2/5000
FVH	(80°-90°)	134.8	1.4			G2/225
BL	(0°-30°)	289.7	3.0	B1/500		
BM	(30°-60°)	661.9	6.8	B1/1000		
BH	(60°-80°)	136.8	1.4	B1/500		G1/500
BVH	(80°-90°)	1.9	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1
2.5°	1341.7	1353.0	1355.2	1358.7	1358.7	1362.9	1370.1	1380.1	1396.4	1404.9	1410.5
5°	1236.7	1245.2	1255.8	1264.3	1280.6	1282.8	1310.5	1337.4	1375.0	1403.4	1423.3
7.5°	1130.9	1140.8	1155.0	1175.6	1196.9	1203.2	1245.2	1290.6	1350.2	1403.4	1436.8
10°	1056.4	1057.0	1069.8	1090.4	1124.4	1132.3	1183.4	1247.9	1322.6	1394.9	1449.6
12.5°	1014.4	1019.4	1025.1	1040.7	1073.4	1078.3	1132.9	1209.0	1294.9	1390.0	1464.5
15°	1014.4	1018.0	1021.5	1029.3	1055.6	1059.8	1108.1	1184.1	1280.6	1392.1	1488.6
17.5°	1025.1	1030.7	1027.9	1037.2	1064.9	1067.6	1110.3	1177.0	1279.9	1405.6	1525.5
20°	1050.6	1054.9	1049.2	1054.9	1082.6	1088.2	1132.3	1190.4	1292.0	1429.1	1571.7
22.5°	1091.1	1093.3	1079.7	1084.0	1112.4	1119.5	1170.7	1228.8	1321.1	1466.7	1633.4
25°	1142.3	1146.5	1125.9	1130.9	1157.8	1166.3	1225.3	1286.3	1367.2	1518.4	1712.3
27.5°	1201.1	1203.2	1185.5	1184.8	1219.5	1231.6	1291.3	1357.3	1429.1	1583.7	1811.6
30°	1268.5	1275.0	1257.9	1255.1	1299.1	1309.0	1368.0	1444.6	1519.9	1681.7	1952.9
32.5°	1321.8	1326.8	1316.8	1324.0	1368.7	1376.5	1460.9	1568.1	1662.6	1820.9	2145.3
35°	1398.5	1401.3	1378.6	1391.3	1442.5	1462.4	1588.0	1741.4	1842.1	1995.5	2396.6
37.5°	1676.1	1676.1	1579.5	1516.3	1565.3	1583.0	1762.0	1959.3	2063.6	2229.8	2713.2
40°	2060.1	2053.7	1912.4	1783.2	1776.8	1811.6	2009.7	2234.0	2349.7	2510.8	3069.6
42.5°	2469.7	2459.8	2267.4	2139.6	2118.3	2130.4	2295.8	2572.6	2690.5	2853.7	3452.9
45°	2833.2	2830.3	2654.2	2482.4	2444.1	2482.4	2652.8	2968.7	3053.3	3225.1	3835.6
47.5°	3137.7	3137.7	3009.2	2897.1	2877.2	2899.9	3136.3	3408.1	3400.3	3620.4	4208.2
50°	3488.4	3485.5	3363.4	3315.2	3335.8	3367.7	3692.9	3871.0	3759.6	4008.8	4541.2
52.5°	3734.0	3751.1	3709.2	3701.4	3806.4	3861.8	4258.0	4324.0	4081.1	4377.2	4790.3
55°	3928.5	3948.4	3996.7	4051.3	4253.6	4326.0	4805.2	4753.4	4350.2	4696.7	4933.7
57.5°	4203.9	4175.5	4250.1	4358.0	4685.3	4772.6	5335.5	5158.7	4566.7	4955.8	4949.3
60°	4538.3	4542.6	4555.3	4691.6	5116.2	5228.3	5858.0	5542.1	4705.9	5114.8	4776.1
62.5°	4940.1	4946.5	4972.8	5182.2	5694.7	5800.5	6414.6	5855.8	4769.7	5070.1	4328.9
65°	4912.4	4939.4	5232.6	5948.9	6574.2	6678.6	7064.1	6075.9	4673.2	4661.1	3524.6
67.5°	4475.2	4519.1	5009.7	6864.6	7900.4	8016.7	7849.2	6119.2	4256.5	3624.7	2299.3
70°	3901.6	3917.1	4507.1	7688.1	9435.8	9553.7	8552.0	5642.9	3230.0	2021.8	1030.0
72.5°	3046.8	3050.4	3742.6	7879.1	10269.3	10275.6	8000.4	4189.1	1737.1	776.6	357.8
75°	2176.5	2155.3	2506.6	6389.7	9034.8	9107.1	5997.9	1964.9	663.8	367.1	178.1
77.5°	1167.1	1190.4	1418.4	3789.4	6241.3	6364.8	3272.6	566.5	337.9	249.9	117.9
80°	360.6	380.5	581.4	1735.0	3535.2	3609.7	1213.2	252.0	235.6	178.1	77.4
82.5°	113.6	117.9	271.2	729.1	1467.4	1501.4	351.4	142.7	161.1	117.9	45.4
85°	32.7	33.4	120.6	271.9	362.7	369.8	98.7	55.4	92.2	73.1	23.5
87.5°	3.6	11.4	45.4	45.4	32.0	31.3	10.7	12.1	26.2	9.2	4.3
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°	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1	1404.1
2.5°	1407.0	1407.7	1398.5	1382.8	1365.8	1351.7	1333.8	1319.7	1309.7	1306.9	1311.9
5°	1417.0	1411.9	1385.7	1338.1	1281.4	1232.4	1177.7	1134.4	1106.0	1094.0	1098.2
7.5°	1431.8	1417.7	1360.2	1266.5	1157.8	1061.3	963.3	887.3	839.1	815.0	818.5
10°	1444.6	1416.2	1317.5	1162.8	996.7	850.4	718.4	626.8	575.7	551.6	552.3
12.5°	1456.7	1415.5	1262.2	1040.0	815.0	636.0	513.2	467.8	453.7	448.6	447.2
15°	1479.4	1417.7	1192.6	899.4	634.0	480.6	435.8	435.1	438.0	436.5	435.8
17.5°	1510.6	1419.7	1113.8	750.4	489.1	423.8	421.7	428.0	432.3	430.2	429.5
20°	1551.1	1428.3	1030.0	602.7	420.2	409.6	414.6	420.2	423.8	420.2	419.5
22.5°	1607.9	1443.2	938.5	484.1	398.2	401.1	405.4	411.7	415.3	410.3	409.6
25°	1677.5	1466.7	848.3	421.0	387.6	391.1	397.5	404.7	408.9	404.0	403.2
27.5°	1767.6	1504.3	765.3	406.7	377.0	379.0	388.3	398.9	404.7	398.2	398.2
30°	1898.2	1566.0	693.5	413.2	370.5	365.6	378.3	393.3	399.6	394.0	393.3
32.5°	2071.4	1653.3	649.5	423.1	367.8	349.9	362.0	381.2	391.9	388.3	388.3
35°	2298.7	1786.1	632.5	434.5	365.6	333.6	342.1	362.7	381.2	384.8	384.8
37.5°	2574.1	1970.7	637.4	439.4	359.2	320.2	324.4	342.1	366.3	377.6	380.5
40°	2887.1	2185.7	665.8	434.5	352.1	308.8	309.5	323.0	344.3	361.3	367.1
42.5°	3210.1	2437.0	718.4	415.9	345.7	298.9	296.7	306.0	320.2	332.2	337.2
45°	3517.5	2695.4	770.2	390.4	337.9	288.9	283.9	287.5	290.4	295.3	298.2
47.5°	3785.8	2877.2	755.3	367.1	327.3	277.6	269.1	267.6	259.1	258.4	257.7
50°	3971.2	2916.9	670.9	343.6	311.6	264.8	251.3	242.8	227.9	220.8	221.5
52.5°	4030.0	2760.0	548.1	320.2	286.1	247.7	228.6	215.0	196.6	190.2	189.5
55°	3952.0	2452.6	438.0	291.7	250.6	225.0	203.8	186.0	171.1	163.3	163.3
57.5°	3761.0	2061.5	346.4	258.4	213.0	199.5	178.1	160.4	147.7	139.8	138.5
60°	3444.4	1637.0	274.0	218.6	181.7	171.8	149.8	138.5	127.1	117.9	115.7
62.5°	2963.8	1168.5	215.0	173.2	151.9	140.5	127.8	119.3	105.8	93.0	90.8
65°	2312.8	714.8	166.2	127.1	122.1	116.4	108.6	100.8	84.5	71.6	69.6
67.5°	1458.8	338.7	118.6	95.8	96.6	93.7	90.2	83.7	71.6	60.4	58.9
70°	642.5	164.0	78.1	73.1	71.6	71.6	74.5	72.4	61.1	50.4	48.3
72.5°	218.6	88.0	58.2	55.4	51.9	51.1	62.4	60.4	49.0	39.1	36.9
75°	114.3	58.9	42.6	39.8	31.3	37.6	49.7	46.8	34.7	25.5	23.5
77.5°	74.5	41.9	29.1	25.5	17.7	24.8	36.9	32.7	20.6	12.8	11.4
80°	46.8	27.7	17.0	12.1	8.5	13.5	19.9	14.2	7.8	2.9	2.2
82.5°	24.8	14.2	6.4	4.3	3.6	4.3	4.9	3.6	1.4	0.0	0.0
85°	9.9	4.9	2.2	1.4	0.7	0.0	1.4	0.7	0.0	0.0	0.0
87.5°	3.6	0.7	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)