

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: P882620

Luminaire Tested: **NAV-SB2C-827-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882620  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2C-827-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

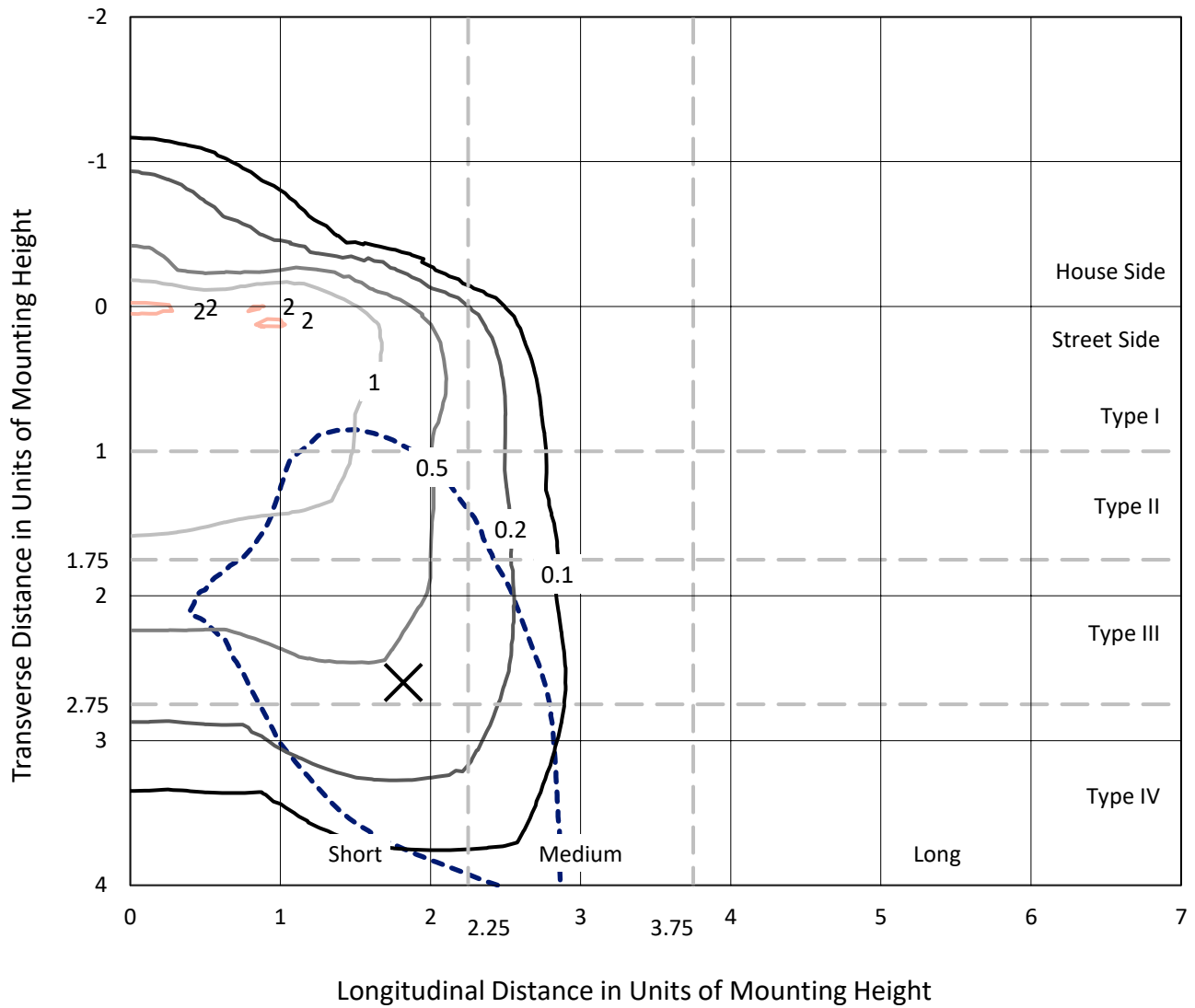
Lumens per Lamp: N/A  
Luminaire Lumens: 9390 lumens  
Efficiency: N/A  
Efficacy: 93.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.857  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.472  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P882620  
 CATALOG NUMBER: NAV-SB2C-827-U-T4FT-HSS

### Iso-Footcandle Lines of Horizontal Illumination

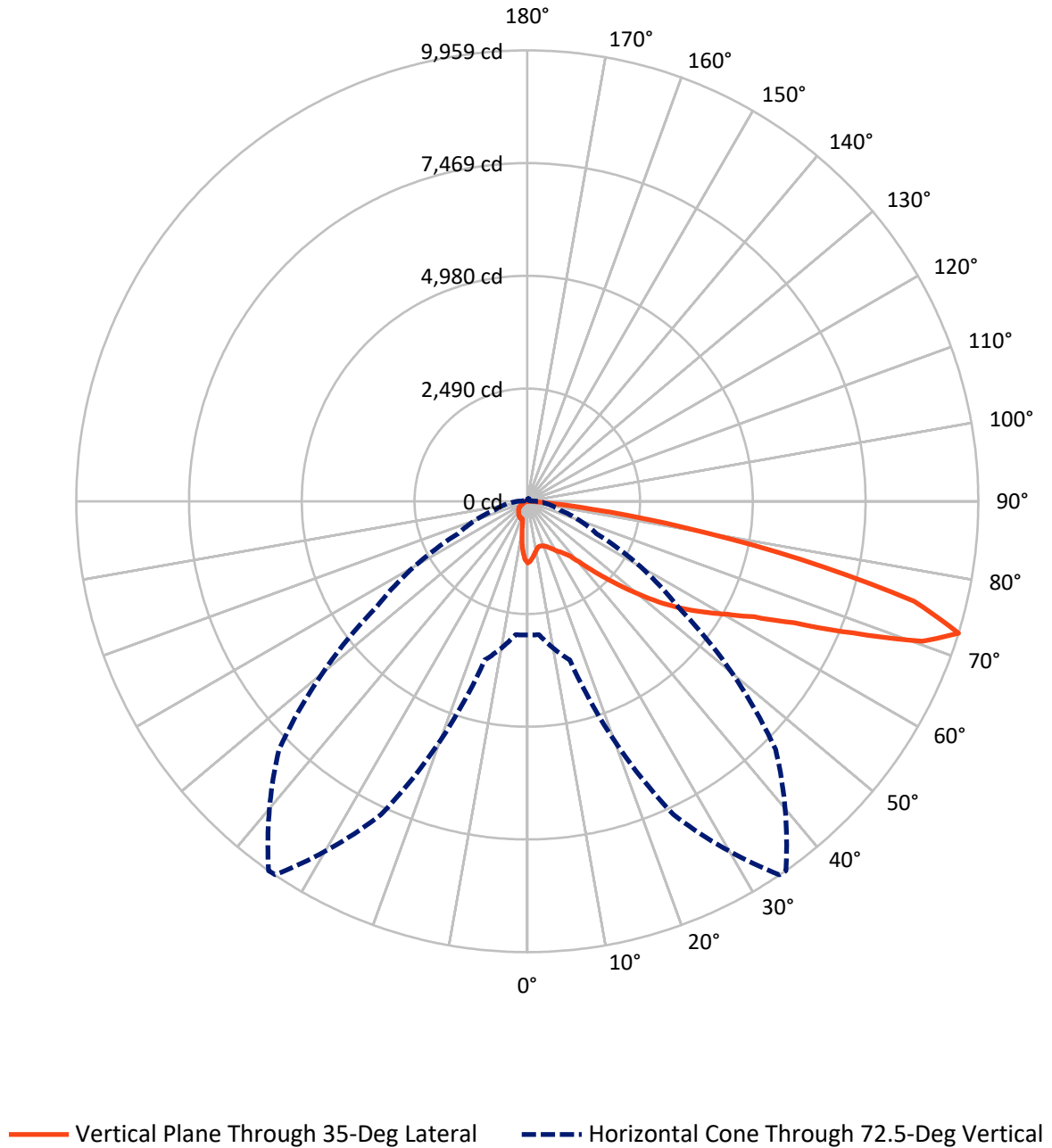
✕ Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P882620  
CATALOG NUMBER: NAV-SB2C-827-U-T4FT-HSS

### Luminous Intensity Polar Plot



REPORT NUMBER: P882620  
 CATALOG NUMBER: NAV-SB2C-827-U-T4FT-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1056.8	0.0	1056.8
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	8333.2	0.0	8333.2
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	9390.0	0.0	9390.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.8	1.2
10°-20°	261.6	2.8
20°-30°	425.0	4.5
30°-40°	709.1	7.6
40°-50°	1341.6	14.3
50°-60°	2131.8	22.7
60°-70°	2637.2	28.1
70°-80°	1639.3	17.5
80°-90°	132.5	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°	9390.0	100.0
0°-180°	9390.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P882620

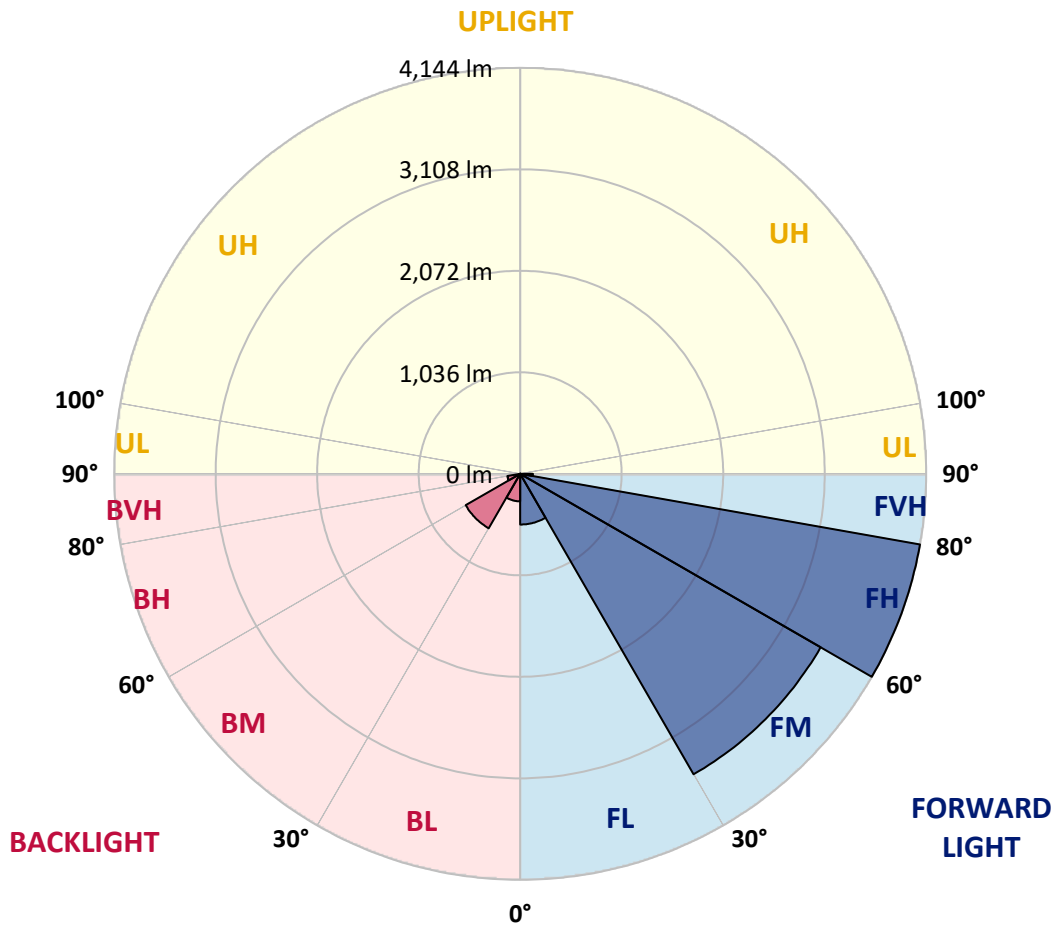
CATALOG NUMBER: NAV-SB2C-827-U-T4FT-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	517.6	5.5			
FM	(30°-60°)	3541.0	37.7			
FH	(60°-80°)	4143.9	44.1			G2/5000
FVH	(80°-90°)	130.7	1.4			G2/225
BL	(0°-30°)	280.8	3.0	B1/500		
BM	(30°-60°)	641.6	6.8	B1/1000		
BH	(60°-80°)	132.6	1.4	B1/500		G1/500
BVH	(80°-90°)	1.8	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 IV Short



REPORT NUMBER: P882620

CATALOG NUMBER: NAV-SB2C-827-U-T4FT-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9
2.5°	1300.4	1311.4	1313.5	1316.9	1316.9	1321.0	1327.9	1337.5	1353.4	1361.6	1367.1
5°	1198.6	1206.8	1217.1	1225.4	1241.2	1243.3	1270.1	1296.3	1332.7	1360.2	1379.5
7.5°	1096.0	1105.7	1119.4	1139.4	1160.0	1166.2	1206.8	1250.8	1308.6	1360.2	1392.6
10°	1023.8	1024.5	1036.9	1056.8	1089.8	1097.4	1146.9	1209.6	1281.8	1352.0	1405.0
12.5°	983.2	988.0	993.5	1008.7	1040.3	1045.1	1098.1	1171.7	1255.0	1347.2	1419.4
15°	983.2	986.6	990.1	997.6	1023.1	1027.2	1074.0	1147.6	1241.2	1349.2	1442.8
17.5°	993.5	999.0	996.3	1005.2	1032.0	1034.8	1076.1	1140.8	1240.5	1362.3	1478.6
20°	1018.3	1022.4	1016.9	1022.4	1049.2	1054.8	1097.4	1153.8	1252.2	1385.0	1523.3
22.5°	1057.5	1059.6	1046.5	1050.6	1078.1	1085.0	1134.6	1191.0	1280.4	1421.5	1583.2
25°	1107.0	1111.2	1091.2	1096.0	1122.2	1130.4	1187.5	1246.7	1325.1	1471.7	1659.5
27.5°	1164.1	1166.2	1149.0	1148.3	1182.0	1193.7	1251.5	1315.5	1385.0	1535.0	1755.9
30°	1229.5	1235.7	1219.2	1216.4	1259.1	1268.7	1325.8	1400.1	1473.1	1629.9	1892.8
32.5°	1281.1	1285.9	1276.3	1283.2	1326.5	1334.1	1416.0	1519.9	1611.4	1764.8	2079.2
35°	1355.4	1358.2	1336.2	1348.5	1398.1	1417.3	1539.1	1687.7	1785.4	1934.1	2322.8
37.5°	1624.4	1624.4	1530.9	1469.6	1517.1	1534.3	1707.7	1899.0	2000.1	2161.1	2629.7
40°	1996.7	1990.5	1853.6	1728.3	1722.1	1755.9	1947.8	2165.2	2277.4	2433.6	2975.0
42.5°	2393.7	2384.0	2197.6	2073.7	2053.1	2064.8	2225.1	2493.4	2607.6	2765.9	3346.6
45°	2745.9	2743.2	2572.5	2406.0	2368.9	2406.0	2571.2	2877.3	2959.2	3125.7	3717.4
47.5°	3041.1	3041.1	2916.6	2807.9	2788.6	2810.6	3039.7	3303.2	3295.7	3509.0	4078.6
50°	3381.0	3378.2	3259.9	3213.1	3233.1	3264.0	3579.1	3751.8	3643.8	3885.3	4401.3
52.5°	3619.0	3635.6	3595.0	3587.4	3689.2	3742.9	4126.8	4190.8	3955.5	4242.4	4642.8
55°	3807.6	3826.8	3873.6	3926.6	4122.7	4192.9	4657.3	4607.1	4216.3	4552.0	4781.8
57.5°	4074.5	4047.0	4119.2	4223.8	4541.0	4625.6	5171.2	4999.9	4426.1	4803.1	4797.0
60°	4398.6	4402.7	4415.1	4547.2	4958.6	5067.4	5677.6	5371.5	4561.0	4957.3	4629.1
62.5°	4788.0	4794.2	4819.7	5022.6	5519.4	5621.9	6217.1	5675.6	4622.9	4913.9	4195.6
65°	4761.2	4787.3	5071.5	5765.7	6371.9	6473.0	6846.6	5888.9	4529.3	4517.6	3416.1
67.5°	4337.3	4380.0	4855.4	6653.3	7657.1	7769.9	7607.6	5930.8	4125.4	3513.1	2228.5
70°	3781.4	3796.6	4368.3	7451.4	9145.3	9259.5	8288.7	5469.2	3130.5	1959.5	998.3
72.5°	2953.0	2956.5	3627.3	7636.5	9953.1	9959.3	7754.1	4060.1	1683.6	752.7	346.8
75°	2109.5	2088.9	2429.4	6193.0	8756.6	8826.8	5813.2	1904.5	643.3	355.7	172.7
77.5°	1131.1	1153.8	1374.7	3672.7	6049.2	6168.9	3171.8	549.0	327.5	242.2	114.2
80°	349.5	368.8	563.5	1681.5	3426.4	3498.6	1175.8	244.3	228.4	172.7	75.0
82.5°	110.1	114.2	262.8	706.6	1422.2	1455.2	340.6	138.3	156.2	114.2	44.0
85°	31.6	32.3	117.0	263.5	351.6	358.5	95.6	53.7	89.4	70.9	22.7
87.5°	3.4	11.0	44.0	44.0	31.0	30.3	10.3	11.7	25.5	8.9	4.1
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: P882620

CATALOG NUMBER: NAV-SB2C-827-U-T4FT-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9	1360.9
2.5°	1363.7	1364.4	1355.4	1340.3	1323.8	1310.0	1292.8	1279.1	1269.4	1266.7	1271.5
5°	1373.3	1368.5	1343.0	1296.9	1241.9	1194.4	1141.4	1099.5	1072.0	1060.3	1064.4
7.5°	1387.8	1374.0	1318.3	1227.4	1122.2	1028.6	933.7	860.0	813.3	789.9	793.3
10°	1400.1	1372.6	1277.0	1127.0	966.0	824.3	696.3	607.5	558.0	534.6	535.3
12.5°	1411.8	1371.9	1223.3	1008.0	789.9	616.5	497.4	453.4	439.7	434.8	433.5
15°	1433.9	1374.0	1155.9	871.7	614.4	465.8	422.5	421.8	424.5	423.1	422.5
17.5°	1464.1	1376.1	1079.5	727.2	474.1	410.8	408.7	414.9	419.0	416.9	416.3
20°	1503.3	1384.3	998.3	584.1	407.3	397.0	401.8	407.3	410.8	407.3	406.6
22.5°	1558.4	1398.8	909.6	469.2	386.0	388.7	392.9	399.1	402.5	397.7	397.0
25°	1625.8	1421.5	822.2	408.0	375.7	379.1	385.3	392.2	396.3	391.5	390.8
27.5°	1713.2	1457.9	741.7	394.2	365.3	367.4	376.4	386.7	392.2	386.0	386.0
30°	1839.8	1517.8	672.2	400.4	359.2	354.3	366.7	381.2	387.4	381.9	381.2
32.5°	2007.7	1602.4	629.5	410.1	356.4	339.2	350.9	369.5	379.8	376.4	376.4
35°	2227.8	1731.1	613.0	421.1	354.3	323.4	331.6	351.6	369.5	372.9	372.9
37.5°	2494.8	1910.0	617.9	425.9	348.1	310.3	314.4	331.6	355.0	366.0	368.8
40°	2798.2	2118.4	645.4	421.1	341.3	299.3	300.0	313.1	333.7	350.2	355.7
42.5°	3111.3	2362.0	696.3	403.2	335.1	289.7	287.6	296.5	310.3	322.0	326.8
45°	3409.2	2612.5	746.5	378.4	327.5	280.0	275.2	278.7	281.4	286.2	289.0
47.5°	3669.3	2788.6	732.1	355.7	317.2	269.0	260.8	259.4	251.1	250.4	249.8
50°	3848.8	2827.1	650.2	333.0	302.0	256.6	243.6	235.3	220.9	214.0	214.7
52.5°	3906.0	2675.1	531.2	310.3	277.3	240.1	221.5	208.5	190.6	184.4	183.7
55°	3830.3	2377.1	424.5	282.8	242.9	218.1	197.5	180.3	165.8	158.2	158.2
57.5°	3645.2	1998.0	335.8	250.4	206.4	193.3	172.7	155.5	143.1	135.5	134.2
60°	3338.3	1586.6	265.6	211.9	176.1	166.5	145.2	134.2	123.2	114.2	112.1
62.5°	2872.5	1132.5	208.5	167.9	147.2	136.2	123.8	115.6	102.5	90.1	88.1
65°	2241.6	692.8	161.0	123.2	118.3	112.8	105.3	97.7	81.9	69.5	67.4
67.5°	1413.9	328.2	114.9	92.9	93.6	90.8	87.4	81.2	69.5	58.5	57.1
70°	622.7	158.9	75.7	70.9	69.5	69.5	72.2	70.2	59.2	48.9	46.8
72.5°	211.9	85.3	56.4	53.7	50.2	49.5	60.5	58.5	47.5	37.8	35.8
75°	110.8	57.1	41.3	38.5	30.3	36.5	48.2	45.4	33.7	24.8	22.7
77.5°	72.2	40.6	28.2	24.8	17.2	24.1	35.8	31.6	20.0	12.4	11.0
80°	45.4	26.8	16.5	11.7	8.3	13.1	19.3	13.8	7.6	2.8	2.1
82.5°	24.1	13.8	6.2	4.1	3.4	4.1	4.8	3.4	1.4	0.0	0.0
85°	9.6	4.8	2.1	1.4	0.7	0.0	1.4	0.7	0.0	0.0	0.0
87.5°	3.4	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)