

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: P962094

Luminaire Tested: **NAV-SB2B-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962094
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8634.6 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
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

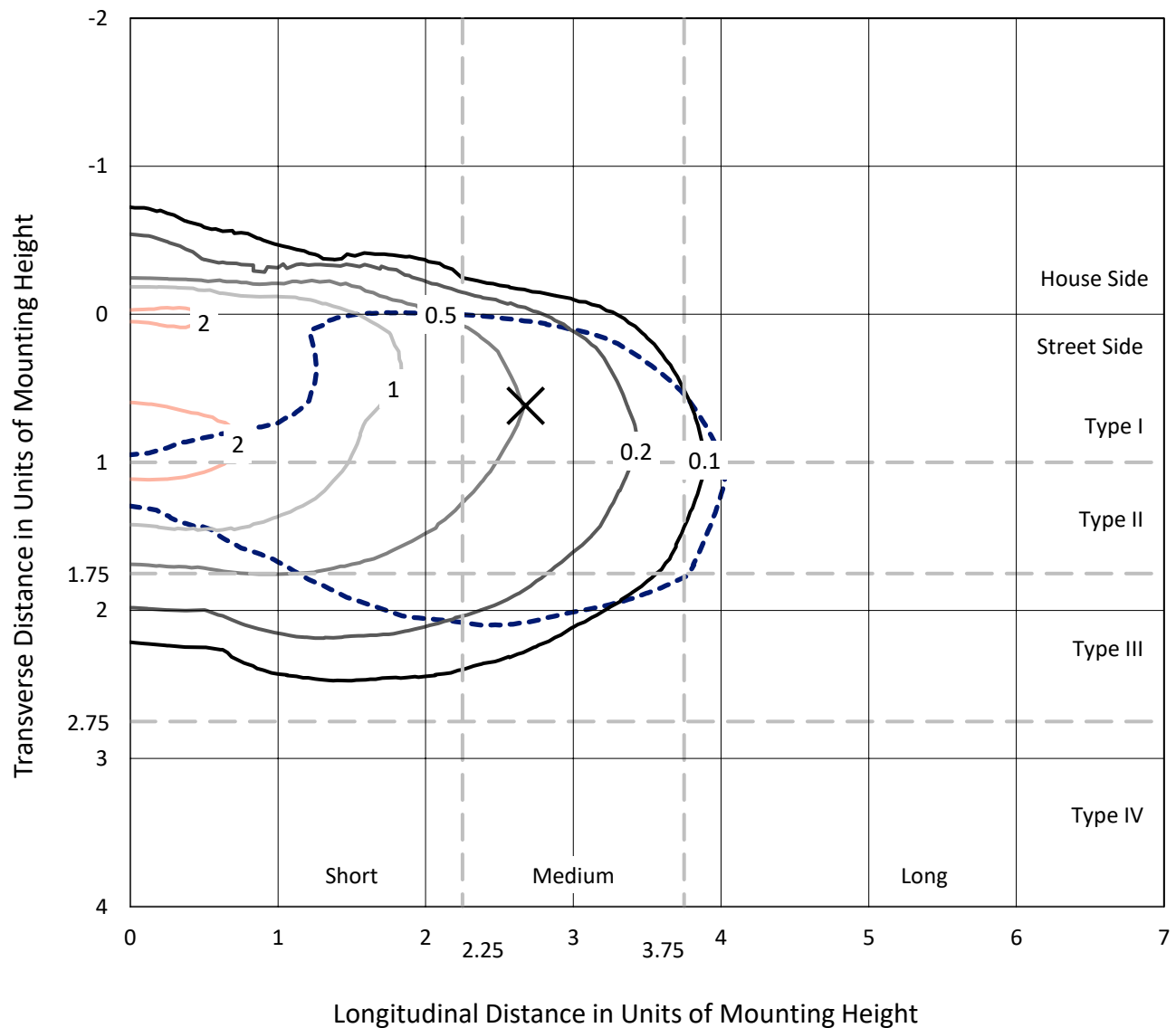


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Iso-Footcandle Lines of Horizontal Illumination

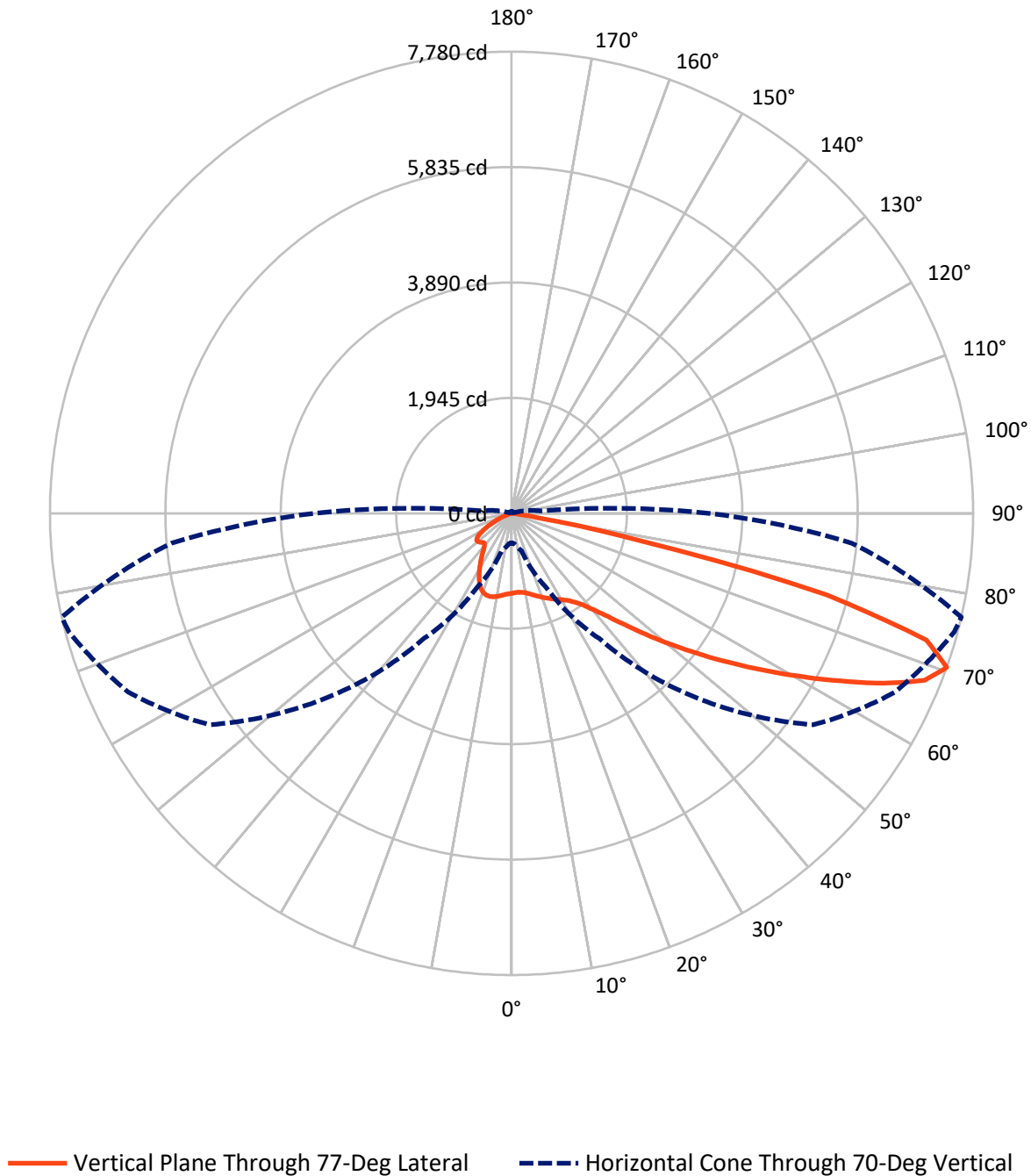
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	910.2	0.0	910.2
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	7724.4	0.0	7724.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	8634.6	0.0	8634.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	1.3
10°-20°	275.6	3.2
20°-30°	426.2	4.9
30°-40°	773.4	9.0
40°-50°	1459.8	16.9
50°-60°	2109.3	24.4
60°-70°	2245.3	26.0
70°-80°	1189.9	13.8
80°-90°	39.1	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°	8634.6	100.0
0°-180°	8634.6	100.0

Coefficient of Utilization



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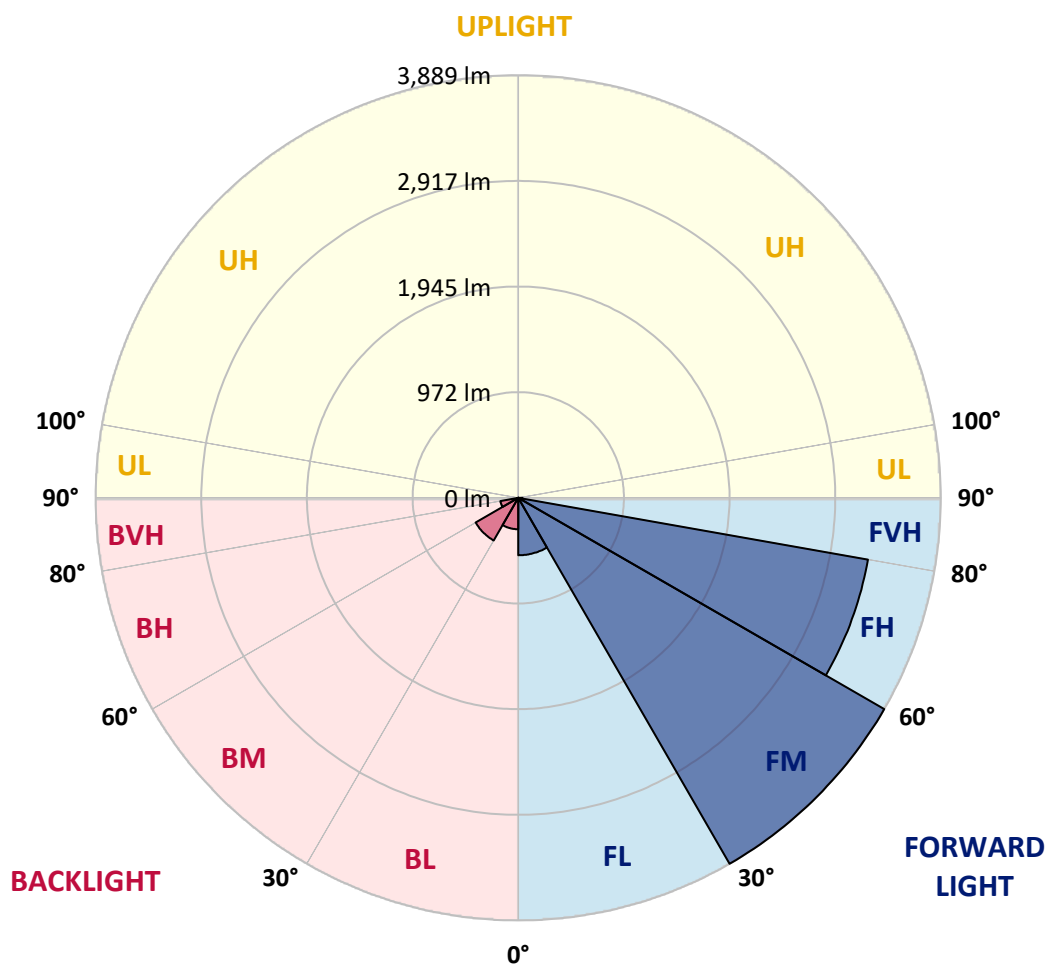
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	528.6	6.1			
FM	(30°-60°)	3889.4	45.0			
FH	(60°-80°)	3268.3	37.9			G2/5000
FVH	(80°-90°)	38.0	0.4			G1/100
BL	(0°-30°)	289.2	3.3	B1/500		
BM	(30°-60°)	453.1	5.2	B1/1000		
BH	(60°-80°)	166.9	1.9	B1/500		G1/500
BVH	(80°-90°)	1.1	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8
2.5°	1264.5	1275.9	1274.3	1282.0	1284.6	1295.6	1306.5	1321.2	1337.5	1337.0	1348.0
5°	1193.1	1204.5	1207.2	1217.6	1230.7	1247.6	1270.0	1299.4	1329.9	1334.9	1356.7
7.5°	1108.5	1120.5	1127.6	1148.4	1172.4	1207.2	1243.7	1286.9	1337.5	1344.7	1386.6
10°	1024.1	1034.9	1044.2	1073.7	1111.8	1163.6	1223.0	1285.2	1353.4	1363.8	1423.2
12.5°	971.7	982.1	992.4	1018.0	1065.5	1128.7	1209.4	1292.8	1379.5	1394.3	1472.8
15°	953.1	962.4	970.6	993.5	1037.7	1109.7	1206.7	1308.7	1412.9	1432.4	1532.8
17.5°	955.9	960.7	966.3	983.7	1026.7	1101.0	1211.7	1336.0	1452.1	1469.5	1592.7
20°	971.7	974.4	975.0	987.0	1025.1	1099.8	1221.4	1362.1	1489.1	1512.6	1652.2
22.5°	991.9	992.9	991.9	1000.1	1035.5	1108.0	1234.5	1393.7	1530.6	1552.4	1712.2
25°	1086.2	1065.5	1039.4	1023.5	1053.0	1123.8	1254.2	1436.2	1575.8	1597.2	1770.5
27.5°	1379.0	1319.6	1225.8	1120.5	1089.0	1146.8	1281.5	1479.4	1621.7	1640.7	1833.2
30°	1854.5	1776.5	1617.3	1380.1	1204.5	1194.7	1316.8	1522.4	1670.2	1690.9	1900.4
32.5°	2331.1	2312.0	2128.2	1800.0	1464.6	1301.5	1375.8	1580.8	1734.5	1750.9	1990.9
35°	2813.1	2774.4	2623.9	2299.5	1865.4	1519.2	1473.8	1657.1	1819.1	1837.6	2122.8
37.5°	3182.2	3158.8	3065.6	2798.4	2340.9	1855.0	1641.8	1775.4	1941.8	1962.5	2291.8
40°	3508.4	3497.4	3465.8	3289.6	2872.6	2294.6	1903.0	1958.7	2111.9	2136.4	2499.1
42.5°	3764.6	3790.2	3808.3	3759.2	3420.5	2796.2	2254.2	2216.0	2349.1	2374.1	2762.9
45°	4026.9	4035.6	4108.1	4179.0	3964.7	3320.8	2650.0	2517.6	2644.1	2675.1	3079.2
47.5°	4195.4	4230.3	4357.9	4482.7	4422.3	3841.0	3075.4	2873.6	2985.9	3044.2	3433.6
50°	4207.9	4273.9	4449.5	4667.0	4755.4	4336.1	3537.8	3279.3	3398.7	3463.1	3812.1
52.5°	3999.0	4101.6	4373.7	4692.1	4935.4	4755.4	4016.0	3685.0	3838.2	3922.2	4204.7
55°	3066.1	3200.3	4088.5	4555.8	4942.4	5073.2	4481.6	4107.6	4327.9	4422.8	4628.9
57.5°	2671.4	2738.9	3214.4	4319.1	4811.0	5201.5	4902.6	4510.0	4860.7	4978.4	5029.7
60°	2222.6	2311.5	2695.9	3932.0	4632.7	5214.0	5274.4	5029.2	5438.0	5570.6	5397.1
62.5°	1510.4	1606.9	1989.2	3266.8	4388.9	5207.9	5579.3	5563.5	6079.9	6222.2	5708.5
65°	935.7	996.2	1248.1	2667.5	4048.1	5214.5	5898.3	6212.4	6757.1	6901.6	5949.5
67.5°	739.4	767.2	898.6	2048.1	3460.9	5067.3	6216.7	6822.5	7394.6	7509.0	6023.2
70°	496.7	513.6	653.7	1373.0	2574.8	4387.8	6210.8	7129.0	7722.8	7780.1	5754.9
72.5°	261.8	274.8	382.2	635.8	1555.1	3119.0	5235.2	6762.5	7396.2	7310.0	4919.0
75°	130.9	152.7	257.4	322.8	664.2	1739.4	3251.0	5331.7	5821.4	5487.7	3156.1
77.5°	99.2	119.9	212.7	212.7	231.2	585.6	1376.9	2908.0	2682.2	2233.5	926.4
80°	63.2	81.8	185.9	160.8	96.6	148.8	358.7	814.7	569.8	433.5	168.5
82.5°	37.1	53.4	154.9	106.3	54.0	55.0	101.4	173.4	147.8	115.0	51.8
85°	14.8	34.8	106.3	42.0	21.2	13.6	30.5	37.1	30.5	22.9	13.1
87.5°	0.0	8.2	18.6	0.0	1.6	1.1	2.2	2.8	2.8	2.2	4.4
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°	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8	1346.8
2.5°	1352.8	1353.9	1357.2	1357.7	1350.1	1340.3	1336.5	1334.9	1328.3	1327.8	1328.8
5°	1369.2	1374.1	1369.2	1355.0	1321.2	1273.8	1237.8	1208.4	1181.6	1173.4	1168.5
7.5°	1401.9	1406.8	1392.1	1336.5	1251.4	1157.1	1072.0	1012.1	958.1	937.9	929.7
10°	1448.8	1455.4	1409.0	1296.6	1146.2	994.6	850.6	749.2	670.1	638.0	624.3
12.5°	1507.7	1510.4	1418.3	1236.1	1009.3	792.8	588.9	480.4	410.0	383.9	375.7
15°	1572.6	1568.8	1419.3	1153.8	822.9	560.6	384.4	315.7	287.4	278.6	278.6
17.5°	1640.7	1624.9	1397.6	1034.9	618.4	383.3	285.2	268.9	263.9	261.8	261.2
20°	1707.9	1672.4	1357.7	879.6	443.8	286.3	259.0	254.1	251.3	250.3	249.2
22.5°	1768.8	1708.4	1289.6	699.0	322.3	253.0	244.9	240.5	235.5	233.4	232.9
25°	1828.3	1729.1	1193.6	530.5	257.9	236.7	230.1	221.9	215.4	212.7	211.6
27.5°	1886.1	1742.2	1073.7	392.6	230.1	221.4	209.4	197.9	193.0	192.0	190.9
30°	1947.7	1746.5	937.4	292.8	213.2	202.3	184.8	171.8	169.0	169.5	169.5
32.5°	2022.9	1753.1	799.9	240.0	199.1	179.4	158.7	145.0	142.9	145.0	144.5
35°	2112.9	1766.2	667.4	220.9	186.4	155.9	133.6	122.2	119.9	121.6	121.1
37.5°	2235.1	1787.4	543.7	217.0	176.1	136.3	112.3	103.0	103.0	103.6	103.0
40°	2397.6	1844.2	433.0	214.3	170.7	121.6	94.9	91.0	92.7	93.8	93.8
42.5°	2595.5	1964.6	358.2	211.0	164.7	115.0	86.2	84.6	87.2	88.4	88.4
45°	2817.4	2117.3	332.1	205.6	159.2	119.4	82.3	80.2	83.4	83.9	84.6
47.5°	3047.0	2266.7	328.8	199.6	153.8	126.0	81.3	76.4	80.2	80.7	81.3
50°	3279.3	2364.4	332.1	190.3	145.0	126.0	81.8	72.6	75.7	77.4	78.0
52.5°	3513.3	2409.1	329.8	170.1	129.8	118.3	81.8	69.3	72.6	73.6	73.6
55°	3740.1	2400.3	296.6	140.1	110.2	104.7	79.6	66.5	68.7	69.3	69.3
57.5°	3919.5	2278.7	235.0	109.1	89.4	87.2	72.6	63.2	64.9	64.4	64.4
60°	4013.3	2011.6	167.9	83.9	70.3	68.7	63.8	58.9	60.0	57.3	56.7
62.5°	4014.3	1658.2	112.3	66.5	56.2	54.5	54.5	52.9	51.8	46.3	44.7
65°	3928.7	1266.2	74.7	52.9	45.3	42.5	45.8	45.3	41.4	33.8	32.7
67.5°	3734.6	829.9	56.7	41.4	34.8	33.3	36.5	38.1	35.5	28.4	27.8
70°	3335.5	483.1	46.9	32.2	26.1	24.5	29.4	32.7	29.4	22.9	21.8
72.5°	2770.6	260.7	38.1	24.0	18.0	16.4	23.5	26.8	23.5	16.9	16.4
75°	1797.7	139.6	29.4	15.8	9.2	10.4	17.4	19.7	16.4	10.9	9.8
77.5°	603.6	61.6	18.6	7.6	4.4	4.4	10.4	12.0	7.6	3.8	3.3
80°	134.7	25.6	7.6	3.3	1.6	1.6	2.2	2.2	1.1	0.0	0.0
82.5°	44.2	10.4	3.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.9	3.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.6	0.5	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)