1) CONSTRUCTION:
   CONDUCTOR: 22 AWG 19/.0058 STRANDED TINNED COPPER NOM. DIA. .0280"
   INSULATION: HIGH DENSITY POLYETHYLENE, .013" NOM. WALL THICKNESS .055"
   PAIRS: COLOR CODED SINGLES TWISTED INTO PAIRS AND WRAPPED WITH AN OVERALL CLEAR POLYESTER TAPE .113"
   CABLE: (2) TWISTED PAIRS CABLED TOGETHER EMBEDDED WITHIN A CORE OF THERMOPLASTIC ELASTOMER .292"
   SHIELDS: AN OVERALL SHEILD OF 36 AWG TINNED COPPER BRAID (65% MINIMUM COVERAGE). SHALL BE APPLIED OVER THE CABLE CORE. A SECOND SHIELD OF AN OVERALL ALUMINIZED POLYESTER FOIL SHIELD (FOIL IN, 100% COVERAGE) SHALL BE APPLIED OVER THE BRAID. .318"
   JACKET: THERMOPLASTIC ELASTOMER, TEAL, .046" NOM. WALL THICKNESS PRESSURE OVERALL CABLE DIAMETER .410"

2) PHYSICAL PROPERTIES:
   TEMPERATURE RATING, MAX. 75°C
   TEMPERATURE RATING, MIN. (STATIC) -40°C
   WT./M', NOM., NET. 86.1 LBS.
   FLEX LIFE (PENDING)
   (126 CYCLES/ MIN, @ 20°C) 1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS)
   TORSION TEST (PENDING)
   (1 LB LOAD, 360°, 71 CYCLES/ MIN, @ 20°C) 3 MILLION CYCLE TEST

3) ELECTRICAL CHARACTERISTICS:
   SEE PAGE 2

4) AGENCY APPROVALS:
   NEC (UL) TYPE PLTC-ER
   NEC (UL) TYPE CM
   CEC (UL) TYPE CM

5) APPLICATION:
   PATCH CABLE FOR ETHERNET/IP CAT 5e APPLICATIONS. MEETS EU DIRECTIVE 2011/65/EU (RoHS II).

6) PRINT:
   QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD P/N 5096 CAT 5e 2PR 22 AWG SHIELDED (UL) TYPE PLTC-ER 75C SUN RES -40C OR C(UL)US TYPE CM -- CE RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)

7) COLOR CODE:
   1. GREEN X 2, WHITE/GREEN
   3. ORANGE X 4, WHITE/ORANGE

8) PACKAGING:
   TO BE PACKAGED AS PER QWC’S STANDARD PACKAGING
3) ELECTRICAL CHARACTERISTICS:
POE COMPLIANT (802.3af) TO 100 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184
CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 100 METER LENGTH
MUTUAL CAPACITANCE, MAX. 5.6 nF/100m AT 1 kHz @ 20°C
DIELECTRIC WITHSTANDING, MIN. 1500V RMS
VOLTAGE RATING, MAX. 300V
D.C. RESISTANCE, MAX. 17.5 Ω/1000' @ 20°C
D.C. RESISTANCE UNBALANCE, MAX. 5% @ 20°C
COUPLING ATTENUATION 30 ≤ f ≤ 100 MHZ ≥ 60 dB MIN
TESTED PER IEC 62153-4-9
SURFACE TRANSFER IMPEDANCE 1 ≤ f ≤ 100 MHz 10 f mΩ/m
NOTE: TESTING FOR THE FOLLOWING IS CONDUCTED OFF THE REEL. (FOR 100m OF CABLE)

IMPEDEANCE, CHARACTERISTIC 1 ≤ f ≤ 100 MHz 100 +/- 15 Ω
CAPACITANCE UNBALANCE, MAX.: 330 pF/100m AT 1 kHz @ 20°C
PAIR-TO-GROUND

RETURN LOSS
1 ≤ f < 10 MHz 20 + 6 LOG(f) dB MIN*
10 ≤ f < 20 MHz 26 dB MIN*
20 ≤ f ≤ 100 MHz 26 - 5 LOG(f/20) dB MIN*

INSERTION LOSS 1 ≤ f ≤ 100 MHz 1.02(1.967 √f + 0.023(f) + 0.050/√f dB) MAX**

NEXT 1 ≤ f ≤ 100 MHz 35.3 - 15 LOG(f/100) dB MIN

ACRF 1 ≤ f ≤ 100 MHz 23.8 - 20 LOG(f/100) dB MIN

PROPAGATION DELAY 1 ≤ f ≤ 100 MHz 534 + 36/f ns MAX

PROPAGATION DELAY SKEW 1 ≤ f ≤ 100 MHz ≤ 25 ns

*PER ODVA VOLUME 2 ETHERNET/IP
**2% HIGHER THAN HORIZONTAL CABLE SPECIFICATION PER TIA 568-C.2. CABLE MEETS THE CHANNEL REQUIREMENT AT 100M AND IS SUITABLE FOR 100M PLUG TO PLUG RUN.